

Beehives, booze and suffragettes: The “sad case” of ELLEN S. TUPPER (1822-1888), the “Bee Woman” and “Iowa Queen Bee”

Bienenstöcke, Feuerwasser und Suffragetten: Der “traurige” Fall von ELLEN S. TUPPER (1822-1888), „Bienenfrau“ und „Bienenkönigin aus Iowa“

MICHAEL MIELEWCZIK, KELLY JOWETT & JANINE MOLL

Abstract: ELLEN S. TUPPER was a 19th century expert beekeeper who was most active during and shortly after the end of the American Civil War. A vigorous writer and apiarist, primarily focussed on business interests and opportunities, she became the first female editor of an entomological journal in 1869. Joining the mid-western suffragettes, who at the time were also strongly linked to the temperance societies, she was soon presented as a role model of a successful businesswoman the early feminist movement. Together with ANNIE NOWLIN SAVERY (1831-1891), a leading American suffragette of her time, she established the “Italian Bee Company”. For a short period, ELLEN S. TUPPER successfully imported and distributed Italian queens and bees to an interested American audience, while she actively promoted bee keeping as a suitable endeavour for women. Her reports on successful fertilization of bee queens that were held in confinement sparked a lively and controversial discussion among entomologists not only in America but also in Europe. At the height of her career she became the first female lecturer in Apiology and the first woman elected to serve as an officer in a national entomological society. At the same meeting more than 30 other suffragettes joined the „North American Beekeepers’ Society“. This was a symbolic and perhaps even defining moment of female activity in science during the 19th century. Her activities soon earned her nicknames such as “Iowa Queen Bee” or the “Bee Woman”. However, financial difficulties put an end to most of her business endeavours. Her career as an apiarist and editor came to a disgraceful end when she was incarcerated for the forgery of notes presented at several banks, subsequently acquitted on the ground of insanity. The forgery trial though has overshadowed ELLEN S. TUPPER’s legacy in the history of women in science: As a farmer’s wife in one of the frontier towns of the Wild West, in a county, which on her first arrival did not even possess a printing press, she was able to start a successful and impressive career as an editress. With her work she and a few like-minded supporters practically single-handedly recruited more women for entomological societies than all other European and American societies and institutions in the 19th century together. For nearly two and a half decades she went on a stubborn and effective crusade to convince women to become beekeepers.

Keywords: Bees, beekeeping, suffragettes, 19th century, transatlantic relations, history of entomology, science and journalism, women in science

Zusammenfassung: ELLEN S. TUPPER war eine bekannte amerikanische Bienenzüchterin des 19. Jahrhunderts, die vor allem in der Zeit kurz nach dem amerikanischen Bürgerkrieg aktiv war. Sie arbeitete als Autorin und Imkerin, wobei ihr Fokus primär auf unternehmerische Interessen und sich ergebenden Gelegenheiten lag. Im Jahr 1869 wurde sie die erste Herausgeberin eines entomologischen Journals. Kurze Zeit später wurde sie Mitglied der Suffragettenvereine im

Mittleren Westen, welche zu dieser Zeit eng mit den Mäßigungsvereinen verbunden waren und welche die Einführung von Prohibitions Gesetzen forderten. Unter den Suffragetten hatte ELLEN S. TUPPER bald die Rolle einer Vorbildfigur als erfolgreiche Unternehmerin inne. Zusammen mit ANNIE NOWLIN SAVERY (1831–1891), einer der tonangebenden amerikanischen Suffragetten ihrer Zeit, gründete sie die „Italian Bee Company“. Für einen kurzen Zeitraum importierte und vertrieb ELLEN S. TUPPER erfolgreich Bienen aus Italien und deren Königinnen an ein interessiertes Imkerpublikum. Zugleich setzte sie sich aktiv dafür ein, dass sich die Imkerei als eine angemessene Tätigkeit für Frauen etablierte. Ihre Berichte über die künstliche Befruchtung von Bienenköniginnen in menschlicher Obhut sorgten für lebhaft und kontroverse Diskussionen in der Imkergemeinschaft, nicht nur in Amerika, sondern auch in Europa. Auf dem Höhepunkt ihrer Karriere wurde sie zur ersten Dozentin für Apiologie ernannt. Zudem war sie die erste Frau, die auf einen offiziellen Posten einer nationalen entomologischen Gesellschaft gewählt wurde; auf derselben Sitzung wurden zudem mehr als 30 Suffragetten Mitglied der „North American Beekeepers‘ Society“ wurden. Dies war ein symbolischer und möglicherweise sogar ein entscheidender Moment für die Bemühungen von Frauen in der angewandten Entomologie des 19. Jahrhunderts. Ihre Betriebsamkeit brachte ihr bald Spitznamen wie „The Iowa Queen Bee“ oder „The Bee Woman“ ein. Finanzielle Schwierigkeiten beendeten jedoch die meisten ihrer unternehmerischen Tätigkeiten. Ihre Arbeit als Imkerin und Editorin nahm ein schmachvolles Ende, nachdem ihr vorgeworfen wurde Bankwechsel gefälscht und in Umlauf gebracht zu haben. Sie wurde verhaftet, letztendlich aber auf Grund verminderter Zurechnungsfähigkeit freigesprochen. Dieser Fälschungsskandal hat allerdings die Bedeutung ELLEN S. TUPPERS für die Geschichte von Frauen in der Wissenschaft überlagert. Als Frau eines Farmers in einer der Grenzstädte des Wilden Westens, in einem Bezirk, in welchem zu Beginn noch nicht einmal eine Druckpresse existierte, war es ihr möglich, eine erfolgreiche und eindrucksvolle Karriere als Redakteurin zu beginnen. Mit ihrer Arbeit rekrutierte sie, und eine kleine Gruppe gleichgesinnter Unterstützer praktisch mehr Frauen für entomologische Gesellschaften als alle anderen europäischen und amerikanischen Institutionen im 19. Jahrhundert zusammen. Über einen Zeitraum von zweieinhalb Jahrzehnten unternahm sie einen starrköpfigen, konsequenten und effektiven Kreuzzug, um Frauen davon zu überzeugen Imkerinnen zu werden.

Schlüsselwörter: Bienen(zucht), Suffragetten, Wilder Westen, 19. Jahrhundert, transatlantische Beziehungen, Geschichte der Entomologie, der Wissenschaft und des Journalismus, Frauen in der Wissenschaft

*“So work the Honey Bee –
Creatures that by rule in nature, teach
The art of order to a peopled kingdom.
They have a king, and officers of sorts,
Where some, like magistrates correct at home;
Others, like merchants, venture trade abroad;
Others, like soldiers, armed in their stings,
Make boot upon the summer’s velvet buds;
Which pillage, they with merry march bring home,
To the tent royal of their emperor.”*

SHAKESPEARE – Henry V.
as printed in TUPPER (1864), p. 212.

1. Introduction

ELLEN SWEETSER TUPPER née SMITH was without any doubt one of the first women to establish herself as a leading entomologist inside the agricultural community of her time. 150 years ago, in 1869, she became one of the editors of the "Bee-Keepers' Journal", which shortly after merged with another journal and became "The Bee-Keepers' Journal and National Agriculturist" (see Fig. 1).¹ She was thus, to our best knowledge, the very first woman to ever hold an editorial position in an entomological magazine and perhaps even more generally, any magazine on a biological topic.

Soon afterwards she assumed similar roles in "The National Bee Journal", "The Bee-Keeper's Magazine" and "The American Bee Journal". This alone is remarkable enough. For example, it would take many years before another woman would appear as a senior member of the editorial staff of the "American Bee Journal" again.² However, what makes ELLEN S. TUPPER a particularly noteworthy character in the history of science and entomology is the fact that she had a key role in the first movement that tried to promote women into entomology, education and science - not just on an individual but also partially institutional level. As such, she became one of the first appointed female lecturers at an Agricultural College, one of the earliest members of an entomological society³ and in this capacity, the very first woman who had ever held an official position as a representative of such a society. The latter event is linked to one of the most remarkable episodes regarding the changing role of women in zoological institutions, when more than 30 suffragettes collectively joined the "North American Beekeeper's Society" in 1871. Her bibliography, which comprises more than 200 publications on beekeeping, is in its extant by far the most extensive one among American women in entomology and zoology before 1900.⁴

While ELLEN S. TUPPER was highly visible and active in the American and international beekeeping community during the 1860s and 1870s, information on her life and work has been mostly forgotten over the course of the last 150 years. If mentioned at all in recent publications, her endeavours have featured as small side-notes on special literature on the early history of the 19th century sugar industry, beekeeping and suffragettes. Until now, no detailed critical biography of her has been available, and there are only a handful of modern publications that have tried to present her in more detailed sketches (REED 1992; HORN 2012; SEGRAVE 2007). One reason for the long neglect of her work was her role in forging and circulating bank notes to obtain money in the mid-1870s.

The present biography re-establishes her position as one of the leading early suffragettes and her particularly important role in promoting women into beekeeping and scientific societies. It gives a detailed outlook on her career as an apiarist and journalist until her fall from grace when she ended up in jail and was put on trial for the alleged forgeries. Numerous previously unknown letters and articles from contemporary American newspapers and magazines have been used to reconstruct the life, work and professional network of ELLEN S. TUPPER. Our biography retraces the context of her entomological work, her strict pathway of self-promotion, her support of "woman's rights"⁵ and her relationship to the early American temperance and suffragette movements. Additional selected short biographies for the most important people that had direct or indirect dealings with ELLEN S. TUPPER link her to the wider historical events of her time and contextualize the political background in which her work took place. The present biography in much detail illustrates, how such an editorial career, without precedent for a woman in biology at that time, was made possible in as much by ELLEN S. TUPPER's own ambition as by her close ties to some of the most eminent politicians of her time. We also show, how ELLEN S. TUPPER came to prominence widely beyond her home in Iowa, even becoming known to many apiarists in Europe. Her international connections that transported the idea of

establishing women in science and beekeeping to Europe, where it initiated the first wave of feminists who supported and promoted the idea.



PORTRAIT OF MRS. E. S. TUPPER.—DRAWN BY AUG. WILL.—Engraved for the *Bee-Keepers' Journal and National Agriculturist*.

Fig. 1: Engraving of ELLEN S. TUPPER, ca. 1869 at the time when she became editress of the “Bee-Keepers’ Journal and National Agriculturist”.

Abb. 1: Portrait von ELLEN S. TUPPER, ca. 1869. Die Gravierung entstand etwa zu der Zeit als sie Redakteurin des “Bee-Keepers’ Journal and National Agriculturist” wurde.

2. Early life and deadly sugar

Information on the early life of ELLEN S. TUPPER is scarce and to some extent difficult to interpret. While there have been several early short biographies (e.g. ANONYMOUS 1871b, 1873a, 1873b, 1876d, HARRISON 1870; TUPPER 1867a; ANDREWS 1910), most of them probably written or at least supported by herself, details, dates and years often vary. She was born in 1822 in Providence, Rhode Island (ANONYMOUS 1873a; HANAFORD 1883; WILLARD & LIVERMORE 1893).⁶ Her father was NOAH SMITH JR. (1800–1868), who would later become an important and

influential politician of the Whig and then Republican Party.⁷ Her mother was HANNAH DRAPER SMITH née WHEATON (1800–1849) (WHIDDEN 1968), a sister of HENRY WHEATON (1785–1848)⁸, a then well-known American politician and diplomat, who had written a book on International Law (HARRISON 1870). Both family lines date far back into the early American colonial history and, according to the SMITH family legend, it was even believed that their ancestry included Captain JOHN SMITH (1580–1631)⁹, ROBERT WHEATON (1605–1696) and other leading founding fathers of the early Puritan colonies (WIGGIN 1923; see also WILLARD & LIVERMORE 1893). ELLEN was the oldest child. Her brothers and sister were CHARLES¹⁰, WALTER¹¹, ROBERT¹², JAMES¹³, SETH¹⁴ and MILA¹⁵ (KNOWLTON 1875; BROOKS 2002). She was educated in Providence (Rhode Island) and later Calais in Maine, where she obtained a thorough education and a good knowledge of the German and French language (ANONYMOUS 1871b; HARRISON 1870). Early biographies of her life highlight that there “*she studied many subjects not usually taught then to girls*” (ANONYMOUS 1873b, p. 210), and indeed she seems to have been quite talented at a very young age. Her name appeared in historical newspapers for the first time in 1831 when she, together with her father, visited the Pawtuxet Fair that was held by the “Society for the Encouragement of Domestic Industry”. She was noted for winning a premium of 5\$ for two “*lamp rugs*” that she had presented, thus outperforming her father who had also won a prize, yet only received 2\$ for his razor strops (see ANONYMOUS 1831, p. 98–99).

At the age of eleven, ELLEN S. SMITH relocated with her parents and siblings to Calais in Maine (HARRISON 1870), where her father and her “*six-foot brothers*” in later years often spent time on hunting and angling tours guided by local Indians of the Passamaquoddy tribe (WIGGIN 1923, p. xxii). In Calais, the family lived for several years “*in the most easterly house of the United States*” (HARRISON 1870, p. 1).

During those early days, around 1833, ELLEN’s father together with JASON SHEPHERD PIKE¹⁶ (1810–1882) and WILLIAM DEMING¹⁷ (1804–1882) became a shareholder and probably also contributor to the “The Boundary Gazette and Calais Advertiser”¹⁸, the city’s first newspaper and outlet for the Whig party, which was then managed and edited by HENRY P. PRATT (1813–1855).

ELLEN, for her part, visited for two years the local school in Calais. There she developed a love for writing, so much in fact that her teacher had to reprimand her when he found out that for several months she had not only written her own essays, but also those of her fellow classmates (HARRISON 1870). There is practically no other information on her early life, but a local legend from Calais, predominantly based on historic events, provides an interesting corner stone not only for her own biography, but also that of her family and the career of one of the most influential journalists in 19th century America, the above-mentioned JASON SHEPHERD PIKE.

As the “Annals of Calais” report, in the year 1835 a mysterious sickness hit the small town of Calais and its Canadian neighbour St. Stephen: Patients were suffering from a wide variety of sometimes severe symptoms including “*pain, weakness and constipation, loss of appetite and sleep, partial paralysis, nausea, &c.*” (KNOWLTON 1875, p. 118). From February to April hundreds of people fell ill and did not recover, no treatment of any kind helped, and twenty to thirty inhabitants of Calais died. The mystery of the disease was only solved when suspicion fell on a supply of sugar that had been imported from Barbados. The package of the sweet stuff itself was rather unremarkable and pleasant, but it had been used by many of the local families and patients who had used it to sweeten their medicine and food. The local physician of Calais, CYRUS HAMLIN¹⁹ (1802–1839), an older brother of the later U.S. vice-president HANNIBAL HAMLIN (1809–1891)²⁰, sent a sample of the sugar to a chemist in Boston to have it analysed. The result revealed that sugar contained a fatal dose of lead. When the people of Calais stopped using the

sweet ingredient from the West Indian island, the symptoms and the disease slowly disappeared, even though some of those affected went on suffering for many years. Many of those who experienced the event “*never after really relished in any kind of West India sweetening*” (KNOWLTON, p. 118).

During the events of that time, ELLEN’s father seems to have come in closer contact with CYRUS HAMLIN and when the latter established the “St. Croix Bank” in early April 1835 NOAH SMITH became one of its directors, while C. HAMLIN took over the role as the bank’s president (ANONYMOUS 1837). The bank thereby was one of more than 50 banks that had been established or re-chartered in Maine in the short time period from 1831 to 1836 due to a largely unregulated banking system (ANONYMOUS 1837). JASON SHEPHERD PIKE, who had already worked for NOAH SMITH in the “Boundary Gazette”, was installed as the bank’s cashier. In the meantime, CYRUS HAMLIN, still suffering from the disease, set sail to Barbados to finally solve the riddle of how the lead had come into the sugar (KNOWLTON 1875). Once he had arrived in the Lesser Antilles, he was able to trace the sugar back to its origin. On the plantation it turned out that there the syrup from sugar cane was stored in lead-coated cauldrons, where it was left to ferment, thus allowing it to absorb the poison (KNOWLTON 1875). CYRUS HAMLIN went to Texas to regain his health, yet he never fully recovered and died shortly afterwards from consumption by yellow fever (WASHBURN 1874; HAMLIN 1936; JACKSON 2016). In his position as the physician of the town he was replaced by his brother-in-law JOB HOLMES²¹ (1797–1864) and JEREMIAH CURTIS (1803–1883)²² became president of the “St. Croix Bank”.

The story itself is still told today as part of the local folklore in Calais, with CYRUS HAMLIN typically featuring as the tragic hero of the story (JACKSON 2016). In fact, a medical journal from 1835 written in Boston in its essence confirms the main details of the story, however, with some small differences and additional details (see JACKSON 1835). Apparently, it was another doctor from Calais named SHILOMETH S. WHIPPLE²³ who had started to examine the cases after he and his family fell ill. Together with members of the JASON SHEPHERD PIKE family, who were also sick, they figured out that only those people who had eaten the sugar had fallen ill, whereas those who had not, stayed healthy. When the sugar was sent to Boston²⁴ CHARLES T. JACKSON²⁵ (1805–1880), a physician from Boston, found in a chemical analysis that it contained 38 grains of lead oxide (see JACKSON 1835, 1852).

To return to the subject of our story: the list of patients does not contain ELLEN’S name or that of her family, but those lists are only fragmentary and contain a selected list of names of those families that had travelled to Boston to find a cure. Nevertheless, it is comparatively likely that the SMITH family at the time was also affected by the poisoning. Many of the listed families were in close contact with the SMITH family, who was also living geographically in the epidemiological hot zone. Additionally, there is another fact which might indicate that ELLEN S. SMITH (TUPPER) was affected personally. When she was put on trial for forgeries of banknotes more than four decades later, her lawyer recalled a story from her childhood relating to her mental health, describing that in her childhood there had been an incident, where she was sleepwalking and found disoriented in the woods (ANONYMOUS 1876f).

On a side-note the lead poisoning case might very well explain ELLEN’S later preference of honey as her sweetener of choice. Additionally, it also establishes as a first indication, how close the SMITH family at that time was to several of the leading scientists of the time. S.S. WHIPPLE and C.T. JACKSON soon afterwards became Surveyors of the Aroostook Territory in Northern Maine.

During this time, ELLEN S. SMITH, as she was still called then, gained her first professional experiences. At the age of sixteen she wrote several articles for different magazines (HARRISON 1870), but those works must be considered lost today.²⁶ She must have been successful,

nonetheless. It is known that one of her articles, in competition with 50 authors, was awarded a prize (HARRISON 1870). During the time of the late 1830s, as a citizen of Calais, ELLEN also became a direct witness of the Aroostook War, a military and civilian conflict between the United States and the United Kingdom over the boundary between Maine and the British-Canadian colony of New Brunswick.²⁷

3. A matron, an alligator and a marriage

Due to her close links with the temperance movement and the local Baptist church ELLEN S. SMITH heard of an Irish immigrant woman named MARY ANN MCILWAIN TUPPER²⁸ (HORN 2012). The latter was a widow and then one of the very few women in Maine who had established her own business (ibid.). To care for her children, she had opened a milliner shop in Bangor and employed year in year out eight to sixteen young women (ibid.). In her shop she sold an "*extensive assortment of Fancy Goods*" which she had imported from Boston (ANONYMOUS 1838a, p. 2). M.A.M. MCILWAIN TUPPER apparently had quite a reputation at the time, particularly because she was trying to care for fallen women (ibid.). Incidentally, when ELLEN S. SMITH (TUPPER) came to meet her son ALLEN TUPPER (1817–1879)²⁹ a couple of years later, she became quite attracted to the young man at first out of curiosity to see the son of such an unusual woman (HORN 2012).

The records don't give any details about how ELLEN S. TUPPER met her husband. It is possible that they became first acquainted in one of the Youth Temperance Meetings that were co-chaired by ALLEN TUPPER, who was known to be a good orator. In any case it is not unlikely that in the summer of 1839 ELLEN was witness to the following previously unknown episode from the earliest days of "Natural History" in the State of Maine. Apparently, ALLEN TUPPER then had become the secretary of the "Bangor Natural History Society", taking over the role from AARON YOUNG (1819–1898)³⁰, who had established the society and later became the most noted botanist in Maine. At that time YOUNG had already held a couple of well attended lectures on the Flora of Maine at the society meetings, but obviously ALLEN TUPPER, in one of the earliest attempts to popularize "Natural History" and science believed in general that lectures and a collection of dead specimens were enough to draw a larger audience. Therefore, for a special exhibition lasting several days in May 1839, he tried to present a more spectacular attraction, which he eventually found in a living specimen of an alligator³¹ that he had, as he notes in an advertisement from the time, "*obtained at much trouble and expense*" (TUPPER 1839, p. 2).

In December 1843 ELLEN S. SMITH married ALLEN TUPPER (ANONYMOUS 1843a; 1873a; HANAFORD 1877). The ceremony, which was performed by JAPHET C. WASHBURN (died 1850), was described by ELLEN S. TUPPER's first biographer "*as one of the happiest events of her life*" (HARRISON 1870, p. 1). By 1844 the newlywed couple moved to Houlton at the northern border between Maine and British-Canada (BROOKS 2002; HARRISON 1870; HAYWARD 1841).³² The border area of the Aroostook County at that time was the latest expansion region for local settlements, which were advertised and sold by the Maine government (HAMLIN 1841). ALLEN TUPPER must have been one the settlers who had followed the offers to buy land in the area for 50 cents to 1 dollar per acre (ibid.). Those lands were sold on credit to the new inhabitants, which had to be repaid in four yearly rates (ibid.). The payment for the first three years, however, could be substituted for work on the local roads that needed to be built. Only the last payment was required to be made to the "Land Agent" in cash. The agent in charge at that time was ELIJAH LIVERMORE HAMLIN³³ (1800–1872) (ibid.), another one of HANNIBAL HAMLIN's brothers.

Autobiographical and biographical sketches published during ELLEN S. TUPPER's lifetime highlighted that for ten years she resided in her husband's hometown, "*enjoying all the luxury that wealth could give*" (ANONYMOUS 1873b, p. 210). During that time ELLEN S. TUPPER was supervising two Sabbath schools in which she taught; one belonging to the Congregational

church, which her husband was a member of, while the second was aligned to the only rudimentarily existing Baptist church that she attended.³⁴ Around the time of her marriage she seems to have become engaged in writing and publishing again. In a first small essay written in March 1843 and published in the magazine "*The Mother's assistant and young ladies' friend*" she reasoned on the influence of sisters on the education of their siblings, a fact which she related to because of her own experiences (SMITH 1843). Two further articles were written during the Christmas holidays, spent at her parents' home in Calais, and published in the same journal. While the first one was a comparable pious text (SMITH 1844a), it was followed, a month later, by a rather moving and autobiographical piece, published under her maiden name initials "E.S.S.". In this second article she described the sorrow she was experiencing when losing her daughter and how religion gave her support (SMITH 1844b).³⁵

ELLEN S. TUPPER was apparently quite proud of her writing achievements, as she would mention it to visitors during the summer (BARNES 1891) and in several later recollections. Eventually, after the loss of her first child, ELLEN S. TUPPER's daughter ELIZA³⁶ was born in October 1844. But soon after tragic events continued to unfold and two further children, probably born in 1846 and 1849, seem to have died at an infant age.

Around that time, ALLEN and ELLEN S. TUPPER relocated to Newtonville (Massachusetts) near Boston, which at this time was the centre of the "woman's right" movement. There they lived close to ELLEN's brother JAMES WHEATON SMITH, who was studying Theology at the local Newton College (CATHCART 1881). ELLEN S. TUPPER became a member of the "American Art-Union" (ANONYMOUS 1848, 1850a) and she started to write again. Two further small moralistic articles appeared in the magazine "*The Mother's assistant and young ladies' friend*" (TUPPER 1850a; 1850b), in which by then her younger sister MILA had also featured as an author (see WHIDDEN 1846).

Unfortunately, during their time in Newtonville ELLEN S. TUPPER became seriously ill (ANONYMOUS 1873a). The family physician, one of "*Boston's best*"³⁷, diagnosed a chronic heart disease, which seriously affected her life expectancy (ANONYMOUS 1873b, p. 210; see also TUPPER 1867a, p. 100 & ANONYMOUS 1873a, p. 2). He informed her that her "*stay on earth*" would probably be "*very short*" (ibid.). When she recalled those events in her early autobiography, ELLEN S. TUPPER remembered that time as being dreadful: "*Ah! The weary days and nights of that last year in New England, when nothing seemed to hold me to earth but the clipping hands of my little ones!*" (TUPPER 1867a, p. 100).

4. Relocation to the Wild West

Because of her illness the TUPPER family considered their options and with ELLEN being diagnosed as a "*confirmed invalid*", an "*entire change in climate*" was proposed (TUPPER 1867a, p. 100). The couple eventually considered that "*no change could be for the worse*" and therefore they agreed to move westwards to relocate in the lands beyond the Mississippi (ibid.). ELLEN S. TUPPER soon found encouragement and new hope in supporting her husband in the preparations (ibid.). Eventually, in 1851 and while friends were astonished by the "*crazy plan*" to become pioneers (TUPPER 1867a, p. 100), the TUPPER family relocated to Iowa, where they established a farm in Brighton (Washington County) during the next year (ANONYMOUS 1873a-b) (Fig. 2).³⁸

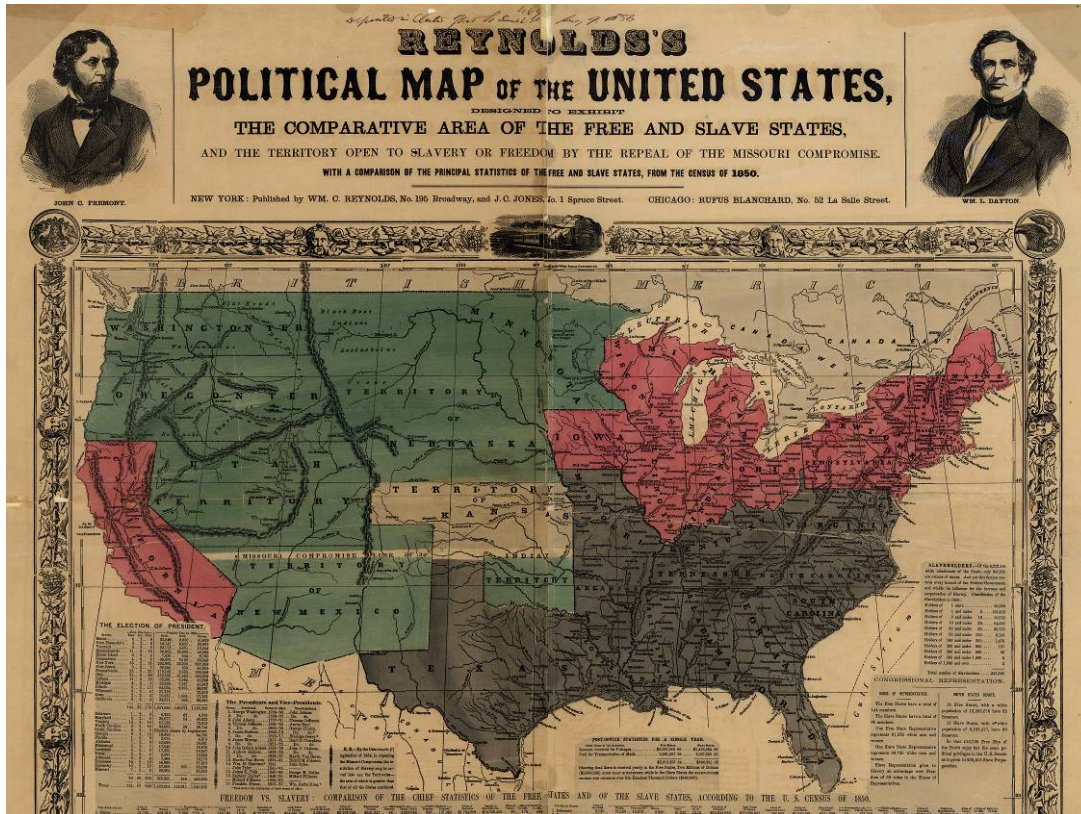


Fig 2.: The United States around 1850, when ELLEN S. TUPPER moved to Iowa. California and Iowa at that time were the only Anti-Slavery States west of the Mississippi. A large part of the United States was still not fully constituted and managed as territories. Land Grant Agents of the States and later business ventures such as the “American Emigrant Company” were established to sell land claims to interested settlers. (Image source: Library of Congress, Geography and Map Division).

Abb. 2.: Die Vereinigten Staaten von Amerika um 1850 zu der Zeit als ELLEN S. TUPPER nach Iowa zog. Kalifornien und Iowa waren zu dieser Zeit die einzigen abolitionistischen Staaten westlich des Mississippi. Ein großer Teil der Vereinigten Staaten war noch nicht voll konstituiert und wurde als Territorium verwaltet. Landnahme-Agenten und später private Unternehmen wie die „American Emigrant Company“ waren dafür zuständig Landparzellen zu verkaufen und an interessierte Siedler zu vermitteln. (Bildquelle: Library of Congress, Geography and Map Division).

The land of the TUPPER farm was acquired from a land grant agent and with the help of mortgages secured by several bonds that had been provided and signed by FREDERICK A. TUPPER (1807–1871), Allen Tupper’s uncle from Savannah.³⁹

and land was established three miles west of the town. It was located close to the Skunk River, a western side arm of the Mississippi along a small tributary (see TUPPER 1855; ANONYMOUS 1867g, 1888d; FLITNER 1889).⁴⁰ The farm itself was comparably large and supported by at least 400 acres of land of which around 80 acres were used actively for farming and raising livestock (ibid.). To start with, ELLEN S. TUPPER first was still ill and “so feeble as to be unable to leave her bed”, but fresh air soon helped her to regain her health and energies (ANONYMOUS 1873b, p. 210). Her husband meanwhile invested in timber land and steam sawmills (; TUPPER 1855; ANONYMOUS 1873a).

When later recalling her early years west of the Mississippi ELLEN S. TUPPER described some of the problems that they experienced: “*fever and ague and malarian fevers*” occurred, while “*high waters on one season and draught the next*” plagued their farm (TUPPER 1867a, p. 100). Lack of experience and strength were other problems that led to “*various losses*” in the family’s farming experiments (ibid.). ELLEN S. TUPPER, however, saw the move to Iowa as a blessing that helped her to mostly recover her own health, while the hardships experienced in the West were like those described “*in the memoires and adventures of sundry pioneer women and home missionaries’ wives*” (ibid.). Yet, the second year on their farm would see the family’s greatest loss. Brighton, as many other towns, was struck by a fatal cholera epidemic (ANONYMOUS 1899). The disease came with one of the new arriving families that had travelled by steamboat from St. Louis to Burlington (ibid.). When they arrived in Brighton, one of their children fell ill and died and soon afterwards everybody who had attended the funeral also became sick (ibid.). When some of the younger men of Brighton died, the citizens of the small town began to realize that doom was coming, and it came. The “*Washington Argus*”⁴¹ for example informed his readers that in Brighton within one week – the last week of July 1854 -- “*between seventeen and twenty deaths from cholera*” had occurred and that only very few people “*have recovered from the disease*” (ANONYMOUS 1854a, p. 1).

“*For weeks terror reigned on every hand*”, as ELLEN S. TUPPER would recall the events, “*when neighbors and friends were hourly summoned, when he, who to-day assisted at the burial of a neighbor, to-morrow, himself filled the plain coffin, hurriedly and without ceremony borne past our door to the grave*” (TUPPER 1867a, p. 101). One of the victims of the epidemic was ELLEN S. TUPPER’s son NOAH TUPPER, her then only one, a loss which she greatly lamented (TUPPER 1867; ANONYMOUS 1912b). He was soon followed in the autumn by his youngest baby sister and a close niece of ELLEN S. TUPPER, who were laid to rest beside him (ibid.). Local reminiscences from Brighton, recorded in the early 1900s, remembered “[...] *that when anyone was sick among the neighbors she was there day and night as nurse and doctor, and she was not afraid of contagion. When her child died of cholera she herself closed its eyes, and she continued her duties with the sick during the rest of that awful epidemic*” (ANONYMOUS 1900b, p. 1). The annals of the town historian of Brighton give a detailed description on the further events of the cholera epidemic (LITTLER 1881; ANONYMOUS 1899, 1900b; Boice 1958b):⁴² The physicians in Brighton in 1854 were Dr. JOHN FERREE (1823–1854), Dr. O.H. PRIZER, Dr. George H. STONE and Dr. Samuel MEALEY. Dr. JOHN FERREE, a young physician who had just opened his practice, was one of the first victims. Dr. MEALEY left Brighton after his wife had died from the cholera. The other two physicians and ELLEN S. TUPPER did everything in their power to fight the disease. Unfortunately, at that time there was not much they could do. The microorganism that causes the disease, *Vibrio cholerae* had not even been discovered.⁴³ Neither was the mechanism of infection known. Therefore, whiskey and camphor were used for internal and external application, but the treatment did not help much. It did not take long, and no further coffins were available in Brighton. Rough boxes had to be used to put the deceased loved ones to rest as quick as possible. The situation became more and more desperate. Half the population had already fled, the town was isolated and country people for miles around kept windows and doors shut when the wind was blowing from towards Brighton. Eventually in the end of July the Brighton citizens had a good idea. Everybody, who was still able to, went to the river and helped to build a primitive lime kiln while others took their axes to cut timber. Loads of limestone were burned on a heap and then transported to Brighton. On the next Sunday the Brightoners went on a mission and used the lime to disinfect the whole town. There remained no house, cellar, outhouse or cesspool which was not drowned in lime (ibid.). And the inhabitants did not stop there. They also sprinkled the disinfectant onto the streets, alleys, backyards and even the manure piles. The following day rain came and purified the lime saturated hot damp atmosphere of the town. This was the end

of the epidemic, and no further deaths were reported from cholera in the following weeks and months.

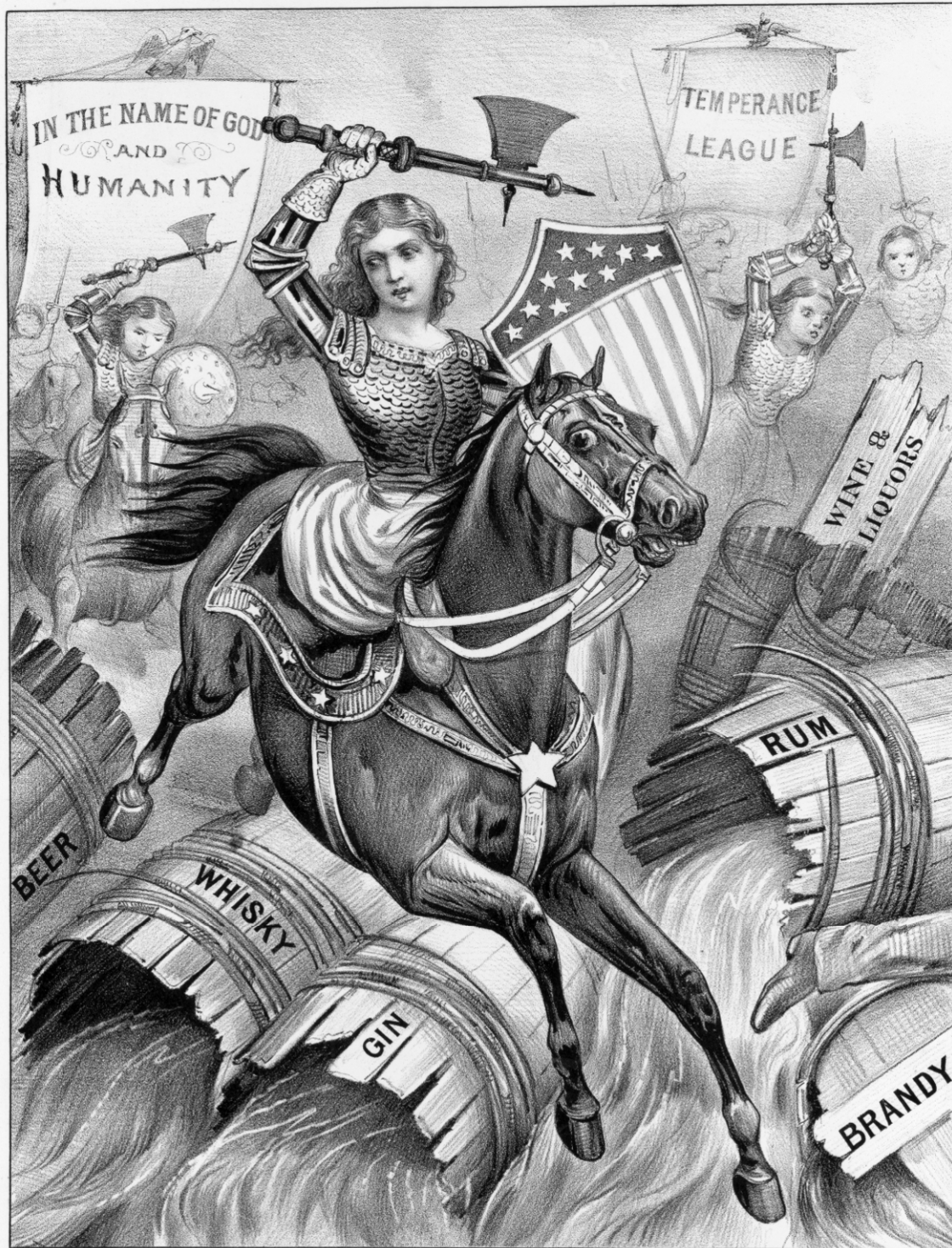
Despite the cholera tragedy ELLEN S. TUPPER much appreciated her new home and tried to focus on the positive sides of life. This is evident from a letter from March 1855 that she wrote and sent to one of her uncles and which we found in an old Baptist magazine (TUPPER 1855; see also Appendix 1). The document itself is an interesting first-hand account of the experiences of a pioneer woman in the frontier towns of the Wild West.

5. Plenty of booze, a declaration of war and a Spartan band of women

One of the specific facts ELLEN S. TUPPER laconically noticed in the letter to her uncle (see Appendix 1) was the Brighton community's progress in regard of the temperance cause. Interestingly the historic events behind this is a somehow more spectacular episode in Brighton's town-history. Preserved in the local annals for the year 1853, a year before the cholera epidemic, the following story, collected from eyewitness accounts by a local newspaper editor in Brighton around 1900, can be found (ANONYMOUS 1900c, p. 1) ⁴⁴ in which ELLEN S. TUPPER in all likelihood was personally involved (see also Fig. 3 & 4): ⁴⁵

Apparently liquor at that time was exceptionally cheap and plenty of it for sale. When a private barrel of whiskey was empty, the town inhabitants quickly had their casks refilled with "*fire water*" at one of the local groceries, such as they would do with molasses or vinegar. Notwithstanding this excessive private consumption, which was considered as "*style and thought to be the proper thing to do*", there was a notorious saloon in town, too. This establishment was a fixed social institution, especially enjoyed and frequented by travelling caravans, strangers and the rougher local population, who "*could not be permitted to congregate at the local stores*". The place, located in one of the town's frame-buildings, was run by a man who went by the name BILLIE LEWIS. He was renowned to never quit selling to his customers so long as they were able to pay and could stand at the bar. Therefore, the saloon soon had acquired a bad reputation. The local women of Brighton protested and accused the barkeeper to make the men so drunk that they would return home just to abuse their families. BILLIE LEWIS was not happy with this interference. Not willing to let the women dictate how to conduct his own business, he told them that he would fight for his rights to the bitter end.

The women meanwhile considered what to do and eventually one day they held a "*council of war*" in the local Presbyterian church. While realizing that the law was on the side of BILLIE LEWIS, they were unwilling to give in. After some intense debate, "*War was declared*" and the women decided to march on the enemy and his work immediately. Led by Mrs. MARGARET BLAINE MEALEY (1789–1867), an old lady who was respected by everyone, a "*Spartan band*" of around 30 women stormed from the church towards the two blocks distant saloon. Entering it, Mrs. MEALEY went straightway to the bar, forcefully brought her fist down onto the counter and told the barkeeper BILLIE LEWIS: "*We demand you liquor, Sir!*".



PUBLISHED BY CURRIER & IVES. ENTERED ACCORDING TO ACT OF CONGRESS IN THE YEAR 1874 BY CURRIER & IVES, IN THE OFFICE OF THE LIBRARIAN OF CONGRESS AT WASHINGTON. 125 NASSAU ST. NEW YORK.

WOMANS HOLY WAR.

Grand Charge on the Enemy's Works.

Fig. 3: Saloon raids by women, such as the one described in the present article, are well-known to have happened throughout the United States in many different places. They became particularly common during the 1870s. Illustrations such as the one above (CURRIER & IVES 1874) helped to promote phrases like “Woman’s Holy War” and “Charge on the Enemy’s Works” on a national scale. The description of the saloon raid in the local Brighton town annals was

clearly influenced by this later rhetoric. The date of 1853 would make the Brighton saloon incident one of the earliest ones that have happened at least west of the Mississippi. In general, the Brighton town annals, based on eye-witness reports, are quite reliable and they are typically supported by additional earlier sources. In the case of the saloon event no corroborating information exists. Some details in the story cross-referenced with local newspapers from Brighton, however, might indicate that the raid would have happened in 1854 or 1855, the year when ELLEN S. TUPPER wrote the previously mentioned letter to her uncle (see Appendix 1). Image Source: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA.

Abb. 3: Saloonübergriffe durch Frauen, wie der im vorliegenden Artikel beschriebene, sind aus der Geschichte wohlbekannt und kamen an vielen verschiedenen Orten in den Vereinigten Staaten vor. Insbesondere in den 1870er Jahren waren solche Ereignisse durchaus üblich. Illustrationen, wie die oben abgebildete, halfen dabei Phrasen wie „Woman’s Holy War“ oder „Charge on the Enemy’s Work“ zu popularisieren. Die Darstellung des gestürzten Saloons in den lokalen Ortschroniken von Brighton wurde klar von dieser späteren Rhetorik beeinflusst. Das angegebene Jahr 1853 für die Geschehnisse würde den Saloonkrieg von Brighton, zumindest westlich des Mississippis, zum frühesten Ereignis dieser Art machen. Einige Details der Geschichte könnten darauf hindeuten, dass der Vorfall minimal später, in den Jahren 1854 oder 1855 stattgefunden hat. Letzteres war das Jahr indem ELLEN S. TUPPER den bereits zuvor erwähnten Brief an ihren Onkel geschrieben hat (siehe Appendix 1). Bildquelle: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA

BILLIE LEWIS, not used to such a kind of treatment, was upset and started a lengthy argument with the honourable Mrs. MEALEY. The continuing loud exchange soon drew a large crowd of spectators in- and outside of the saloon, curious to find out what was happening. Among them were both friends of Mrs. MEALEY and those of BILLIE LEWIS. Meanwhile some of the other women used the whole gallimaufry to sneak into the backroom and attack the whiskey barrels. They tried to smash some of the heads, but unable to do so, one of them, ANN MCKINZIE, succeeded in knocking off one the spigots of a cask. Before long odour and fumes of whiskey filled the tavern room and the situation rapidly escalated. BILLIE LEWIS took up his gun, laid it over the counter, and threatened to shoot everybody who would not leave his booze alone. A sympathizer of the saloon owner inflamed the situation even further, yelling: *“Shoot ‘em, Billie, shoot‘em !”*

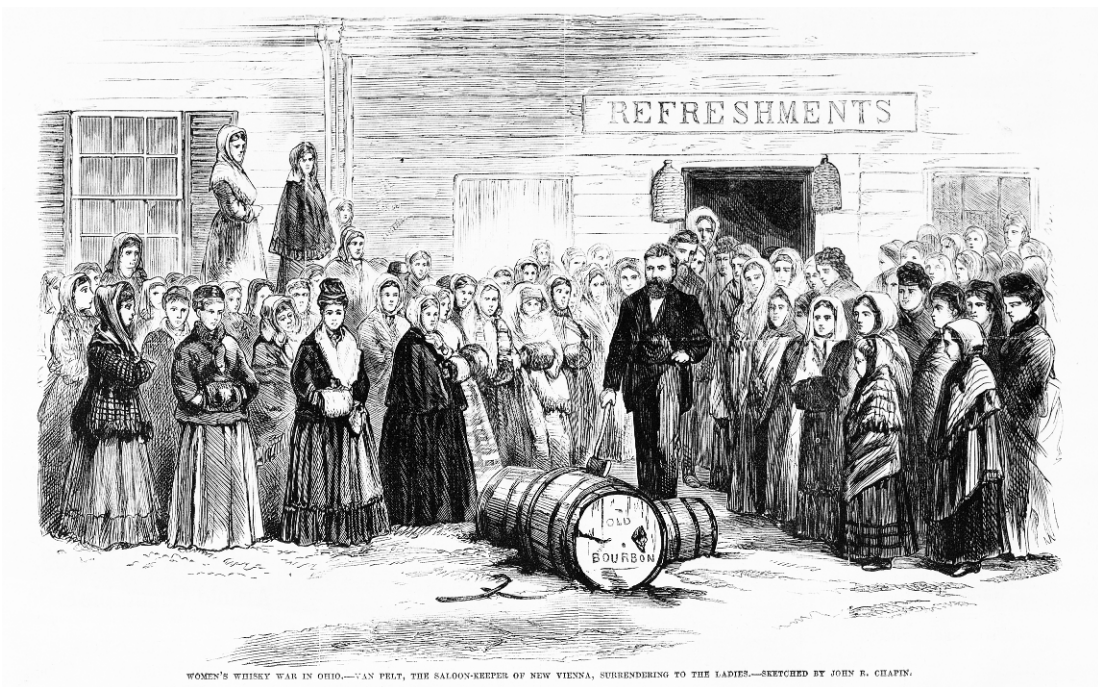


Fig. 4: There are no visualisations of saloon raids from the 1850s, even though it is known that several happened. However, during the 1870s conflicts such as the here shown “Ohio Saloon War” drew some attention in Illustrated Newspapers and visualize the process of such events (CHAPIN 1874). Source of Image: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA.

Abb. 4: Es gibt keine graphischen Darstellungen von gestürzten Saloons aus dem Zeitraum der 1850er Jahre. Spätere Darstellungen aus den 1870er Jahren, wie der hier dargestellte

„Saloonkrieg von Ohio“, lenkten jedoch verstärkt die Aufmerksamkeit auf solche Aktivitäten und visualisieren, wie solch ein Sturm ausgesehen haben mag (CHAPIN 1874). Bildquelle: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA.

Saving, the day, BILLIE LEWIS did not shoot. The moderate voices prevailed and for the day a truce was declared. The temperance women left, but not without leaving BILLIE LEWIS a warning that they were not done with him and his saloon if he *“continued to send men home drunk to abuse their families”*.

BILLIE LEWIS, angered by what just had happened, went to the nearby Marion township, where Esquire DEWEES held court in a neighbourhood long known as “Hell’s Half Acre”. LEWIS swore out against several of the women to receive warrants against ten of them on the charge of initiating a riot. LEWIS in his dander though badly mixed up names and thus only four of those ten warrants could be served to Mrs. JOSEPH POLLOCK, Mrs. SIMON PARSHAL⁴⁶, Mrs. DAVID CAUFFMAN and Mrs. ANN MCKINZIE. As soon as the first arrests were made, Dr. STONE rode out of Brighton to get a lawyer for the women.

When Dr. STONE and an attorney named R.S. MILLS returned to Brighton the city was ready for a trial and a spectacle. The crowds gathered, and two wagon loads of women arrived. The front wagon, decorated with flags and banners, was so full that it had to be drawn into town by four horses. On top was a jolly lot of 20 women, among them the prisoners and their friends, who were *“going to meet their doom and have a good time”*. Several prominent local citizens, such as Dr. STONE, Dr. PRIZER⁴⁷ and J.G. MCCULLOUGH joined, to ensure that the women got a fair trial, but overall the situation looked *“more like a picnic party than a lot of lawbreakers going to settle with outraged Justice”*. When the small convoy eventually approached the judge, the place was full of people to watch and witness the trial. The whole town was on its feet, denizens from the neighbourhood were there and additionally a troupe of temperance people had come from Washington (Iowa). At first R.S. MILLS, the lawyer of the women, was rather suspicious of the judge, because he believed that Esquire DEWEES sympathies were with the saloon. Yet, after a short while he discovered that the indictments were bad and thus went into trial with a motion to dismiss the case. MR. SHERMAN, a Washington lawyer hired by BILLIE LEWIS to prosecute the case, tried to argue against this, but after debating the pros and cons for hours, dinner time arrived. The judge ruled to dismiss the case and ordered the release of the women from their custody.

The women celebrated their victory and spread a great dinner on the grass in the court yard. They emptied their well filled baskets, which they had brought along and invited everybody who was present to join them. Meanwhile some of the ladies conferred with BILLIE LEWIS and made him promise to quit his saloon in Brighton. Doing so, he was invited to eat with them. After the dinner the jubilant party returned with flying banners and jolly singing to Brighton, where *“they were received by the people as conquering heroines of a hard fought battle.”* BILLIE LEWIS, however, stayed true to his word and soon after he left town and never returned.

If the saloon raid in Brighton has happened in exactly the described way is very hard to say. Printed newspapers in Washington county (Iowa) only started to publish in 1854. The “Washington Argus” was the first that reported on the Brighton township (KECK 1869; ANONYMOUS 1880; MOTT 1925; 1928), but only one issue had survived into the 20^h century and even this copy seems to be lost now (see ANONYMOUS 1905). It is not included in the otherwise very complete run of digitized newspapers that are available for Southeast Iowa. The only aspect of the story which is certain is that the names in accounts are all historical figures of the given period. Interestingly, though, there is a direct link between ELLEN S. TUPPER and BILLIE LEWIS, whom we believe was WILLIAM BLACKSTOCK LEWIS (1806-1888). Old landownership maps

from the 19th century are very difficult to interpret in detail, because they only exist for very selective years and land was highly fragmented. However, it seems that WILLIAM B. LEWIS owned the exact land, which later became ELLEN S. TUPPER's apiary, directly beside a small tributary that today is still called "Honey Creek". Nonetheless, the only very fragmentary existing information on the historical WILLIAM B. LEWIS and the BILLIE LEWIS of the town legend are impossible to bridge to provide a more detailed account. Notwithstanding those problems, the saloon raid legend gains much plausibility from another side. As a matter of fact, ELLEN S. TUPPER's father NOAH SMITH was instrumental in passing the "Maine Liquor Law" in 1851. While the law is most commonly associated with the Name NEAL DOW (1804-1897), it was NOAH SMITH who had introduced into the Maine legislative (see SMITH 1855). The law was specific to Maine, but it drew a large national attention and by 1855 twelve other states had joined the Maine total prohibition.⁴⁸ The law was yet unpopular in large parts of the working population. One group who took offense were certain German immigrants especially along the Mississippi valley, who found it hard to bring those prohibition attempts into accord with their own lifestyle (see also Fig. 5). The Washington county with its relative large number of German immigrants, Brighton's neighbour town Germanville, and the establishment of the first vineyards in Brighton during the 1850s illustrate the local background for Brighton during the 1850s. Local Iowa newspapers from the relatively close by Iowa cities of Keokuk and Muscatine for the period of 1853 to 1856 contain a lot of additional details.⁴⁹ They illustrate for example that the temperance movement indeed spread very early into the south-eastern Iowa counties. One of the first traces of the women's rights movement in southeast Iowa can be traced back to June 1854 when FRANCES D. GAGE (1808-1884) went to Fort Des Moines to lecture on temperance and woman's rights. Those kinds of activities were not without success. For example, a "Ladies' Maine Law Society" was established in Muscatine in 1855 (ANONYMOUS 1855a) and, originating from the saloon incident and the temperance sentiment, a lodge of the "Order of Good Templars" (DAWSON 1857; ANONYMOUS 1900c) and a "Lodge of Odd Fellows" was formed in Brighton before 1856 (see ANONYMOUS 1856c).

ELLEN S. TUPPER's letter to her uncle proofs that she was part of temperance movement in Iowa (see Appendix 1). However, the letters content is exceptionally innocent and does not provide any further details. In fact, it is so harmless that one wonders, why it had been published in the first place. The answer might be that it was much less innocent at all. Beside temperance, abolition and the extension of slave rights to new territories, such as Kansas, were the defining topics of politics in 1854 and 1855. Pro slavery forces with support of "Border Ruffians" in Missouri tried to influence election results and stuffed ballot boxes. Free Soilers in the territories led their New England supporters knew that they needed firearms to defend themselves. Their strongest supporter was Reverend HENRY WARD BEECHER (1813-1887). He was the minister of the Plymouth church and congregation that had a very large attendance. In his sermons he described the difficult situation in the west and passed the collection plate. From this collection rifles were bought and shipped in crates underneath a set of covering bibles to the west to support Free Soilers and anti-slavery parties in Kansas. The exact logistics of the operation have never been fully revealed, but the incidents itself are well known and thus Sharp's rifles were later called "Beecher's Bibles", which are said to have been shipped hidden under a stack of bibles. There are a few companies such as the "New England Emigrant Aid Company" that are known to have been involved in the logistics. However, another company that might have played a role in those events is the "American and Foreign Bible Society" from Brooklyn. Reports of the company for 1854 show that 288 bibles and 365 testaments were sent to the west. Two lines above this entry, ELLEN S. TUPPER is listed to have received 25 bibles and 74 testaments.

One detail in ELLEN S. TUPPER's letter, which allows an additional contextualisation, is the date when it was authored (18th March 1855). It was thus written two weeks before the new Kansas Territory held the election for its first legislature, which would eventually decide whether slavery would be allowed in Kansas. While Sharp's rifles were often called "Beecher's Bibles" after February 1856, the first shipments of weapons from New England to Kansas and Missouri began already in 1855 (EARLE 2015). After the winter ice on the Missouri had melted away, boatload after boatload of settlers from New England started a journey towards Kansas, most of them passing through Missouri proslavery territory (ibid.). By June 1855 it was already widely reported in Kansas that 700 Sharp's rifles had been sent from Boston and Connecticut with the help of an "Emigrant Aid Society" (ANONYMOUS 1855c). The ever-observant young MARK TWAIN (1835–1910), at that time living in St. Louis, might have incidentally witnessed the arrival of the first such shippings in February 1855. In one of his letters to his brother in ORION CLEMENS (1825–1897) in Iowa he described, how the St. Louis Post Office and local bookstores were for a week long practically so full that it was nearly impossible to get into the office at all (Clemens 1855d).⁵⁰ Even though bibles and rifles are not explicitly mentioned in this letter, a grotesque and hard to decipher article, published only a few days afterwards in the Journal of ORION CLEMENS (1825–1897), already insinuated a potential relation between bibles (and particular foreign ones) and "Uncle Sam" (ANONYMOUS 1855b).⁵¹ The further political development is well known, and the events are commonly described under the headline "Bleeding Kansas" (WOODS 2017). If ELLEN S. TUPPER or her husband had any role in it is not known. No other information for the years 1855 to 1856 exists and it thus impossible to know with absolute certainty what kind of package ELLEN S. TUPPER had received by her bible order.

When the "Washington Press" started to publish in 1856, "Border Ruffians" and the Kansas conflict were still some of the major topics. However, one of the very first articles of the newspaper described a visit to Brighton and the Fourth of July festivities from 1855, which had been partly prepared by "*the fair ladies*" of the town (ANONYMOUS 1856c, p. 2). Apparently, a political gathering was part of the festivities, celebrated under the banners "*Free Speech, Free Press, Free Soil, Free Men, and Fre-mont*" (ibid.). It was the logo of the newly formed "Republican Party" (see also Fig. 6).



NATURALIZED German Citizens, celebrating the four hundredth anniversary of the first brewing of LAGERBER, in Hopple-popple, on the Rhine, A. D. 1452. Dedicated to Neal Dow, and the friends of the Maine Law, and which, in their eyes, may become a new argument for Native Americanism.

Fig. 5: Temperance and the “Maine Liquor Law” were hotly debated topics in the early 1850s. The law was especially associated with name NEAL DOW, who had lobbied for it, but the law itself had been introduced and supported by ELLEN S. TUPPER’s father NOAH SMITH in the Maine legislature. The above figure (ANONYMOUS 1852c) visualises in amusing fashion that particularly certain German immigrants had resentments against the prohibition laws. Source of Image: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA

Abb. 5: Temperenz und das „Maine Liquor Law“ waren in den frühen 1850er Jahren heiß diskutierte Themen. Das Gesetz war typischerweise besonders mit dem Namen Neal Dow verbunden, welcher sich besonders dafür eingesetzt hatte. Tatsächlich war es allerdings ELLEN S. TUPPERS Vater NOAH SMITH gewesen, der das Gesetz in die Legislative von Maine eingebracht hatte. Die oben dargestellte Grafik (ANONYMOUS 1852c) visualisiert in amüsanten Form die Ressentiments, die insbesondere eine spezielle Gruppe von deutschen Einwanderern gegenüber dem Gesetz hatte. Bildquelle: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA.

6. Teaching and family

In the second half of the 1850s the TUPPER family became larger again. In 1855 and 1858 their daughters KATE⁵² and MARGARET⁵³ were born, later followed by the four younger siblings HOMES⁵⁴, MILA⁵⁵ ROBERT SMITH⁵⁶ and FREDERIC ALLEN⁵⁷ (ANONYMOUS 1863b; TUPPER 1972).⁵⁸ The TUPPER kids were educated at home for most of the 1850s, the eldest daughter, however, was soon sent to the Mrs. HARRIS’ popular school in Mount Pleasant (HANSON 1882).

For some time, ELLEN S. TUPPER worked as a teacher in a nearby school for which she received 20 dollars a month (ANONYMOUS 1873a). Biographies written during the lifetime of ELLEN S. TUPPER typically linked this with a romantic story of her riding the three miles to school on horseback with a baby in her arms (ANONYMOUS 1873a; HANAFORD 1877). When the school later closed, she opened one in her own home, which was soon full of pupils (ANONYMOUS 1873a).

At the end of the 1850s her husband’s business got into trouble. His health failed, and he was unable to attend to his business. Parts of the farm and the “Fleak House” in Brighton, where the

family lived for a couple of years, had to be sold around 1857 (see FLITNER 1889; ANONYMOUS 1900b, 1900e). As early biographical articles recall it, ALLEN TUPPER's "*wealth melted away like dew before the sun*" (ANONYMOUS 1873a, p. 2). Around that time ELLEN S. TUPPER sometimes visited the State Fairs of the then newly formed Iowa Agricultural College, presenting embroideries made by her.⁵⁹

The only other notable event we know of and that happened during that time-period shortly before the Civil War was ABRAHAM LINCOLN's election campaign for the presidency in the summer of 1860. In it ELLEN S. TUPPER's father played an important role supporting the ABRAHAM LINCOLN / HANNIBAL HAMLIN presidential ticket (see Fig. 6). Maine was then thought to be of strategic importance and a key battle ground State, because it was the first State in the nation to hold elections in 1860, which included ballots for the six congressional seats, the governor's race and several state-wide offices (DESMOND 1994). As such NOAH SMITH for example advised LINCOLN on the potential election problems in his home State Maine, providing reassurance on the results to be expected.⁶⁰ His efforts, however, were not limited to Maine. Both for family reasons and obviously also as a political reconnaissance mission to collect impressions from the Western frontier, he travelled to Iowa in summer of 1860, where he visited his daughter ELLEN S. TUPPER. There he held, supported by the "Wide Awakens" movement, a large election campaign meeting in Brighton (Iowa), where his daughter lived. With an attending audience of 1,000 to 1,500 people (ANONYMOUS 1860a) it was one of the larger rallies in the frontier towns along the westernmost parts of the westward extended Mason-Dixon line, which were hugely important for LINCOLN then to win his first presidency. The event itself certainly was only a test, but nevertheless a success according to the local newspaper and Brighton was clearly in Republican hands.⁶¹ When NOAH SMITH left shortly afterwards to return to the East Coast, he was joined by ELLEN's oldest daughter, his granddaughter ELIZA, who would continue her studies there (WILLARD & LIVERMORE 1893). In the September United States House of Representatives elections in Maine all six congressional seats and the governor's race had been won by the Republican candidates. The Maine political establishment lost no time, and reliable Maine Republicans were sent west by NOAH SMITH and HANNIBAL HAMLIN to establish a direct contact point in the Lincoln election campaign (see HAMLIN 1860; SMITH 1860).

In November 1860 LINCOLN was elected as the 16th president of the United States. Both the States of Iowa and Maine had voted for LINCOLN and the latter results were officially proclaimed by ELLEN S. TUPPER's father as the Speaker of the House in Maine. However, before LINCOLN could be inaugurated, most of the Southern States had seceded from the Union, the Confederacy had selected JEFFERSON DAVIS (1808–1889) as provisional president, and all attempts to maintain the peace were unsuccessful. Yet, while peace was still possible, the citizens of Brighton and vicinity held a meeting, co-chaired by ALLEN TUPPER as Secretary, to express their preference for a new postmaster in expectance of the new Republican administration (see ANONYMOUS 1861b).

LINCOLN eventually was inaugurated on the 4th March 1860. A month later the Civil War started when confederate troops opened fire at Fort Sumter. The largescale political events also affected ELLEN S. TUPPER. She later described that her husband had volunteered "*when the war broke out*", and only returned at the close of the war (ANONYMOUS 1871b, p. 157). Reports from the war though are conflicting as they also highlight that during mustering he was rejected from enrolment in the 30th infantry due to a diagnosed rupture.⁶²

Nonetheless, with her husband gone, ELLEN S. TUPPER had to find new ways to support and feed her family.

7. Early work as a beekeeper and editor

There can be little doubt that by latest the early 1860s ELLEN S. TUPPER started to sell honey from her bee-keeping operations. From an economic point of view this was not a bad decision. During the American Civil War sugar supplies collapsed and prices for refined sugar skyrocketed in the northern States from 7 cents per pound before 1860 to 20 cents and more in 1865 (ANONYMOUS 1949). There were several reasons for this. In the Confederacy slaves abandoned the Louisiana sugar plantations; neither could the Union obtain the commodity from the Southern States any longer (SANEFUJI & LEE 2001). The sea blockades during the war and uncertainties in land transport were other issues. In the Coastal states other sources of sugar, such as plantations in Hawaii, gained relevance (SANEFUJI & LEE 2001), but in the states along the Mississippi, which then was the major route of transport, the shortage of supply was something that needed to be considered.⁶³ The problem did not remain unnoticed at the time and was already widely discussed from the late 1850s to 1860, whereby it was suggested that *Sorghum* could be used as an alternative crop to ensure the supply of syrups and crystal sugars in North-Western States (see for example ANONYMOUS 1860b).⁶⁴ ELLEN S. TUPPER, presumably aided by her family's knowledge on the West Indian sugar trade in Maine, was probably also aware of the potential supply problem.⁶⁵

She later reported that as early as in 1863, still during the Civil War, she had fifty-six colonies of common bees and two stocks of Italian bees, which she raised in her hometown in Brighton, Iowa (KING & KING 1870). However, the business at the time must still have been of rather limited extent. What is known of the early beginnings of ELLEN S. TUPPER's work as a beekeeper originates from a short autobiographical letter, which was published in 1867 in the magazine "The Prairie Farmer" (TUPPER 1867a; REED 1992). There she described that her interest in beekeeping was originally initiated by a small book on apiculture, which she found highly fascinating (TUPPER 1867a; ANONYMOUS 1873a).⁶⁶ After she had read it "*again and again*" she eventually procured four beehives and started her own beekeeping in spring 1860 or possibly even as early as 1857 (TUPPER 1867a, p. 101; see also ANONYMOUS 1873a-b). Her apiary was situated west of Brighton near the shores of small tributary of the Skunk River, today called "Honey Creek", where the bees had a "*large forest range*" (TUPPER 1867g, p. 85; see also TUPPER 1862; ANONYMOUS 1867g). Soon this resulted in a small business from which, as she described it, she "*found great pecuniar profit*" (TUPPER 1867a, p. 101).

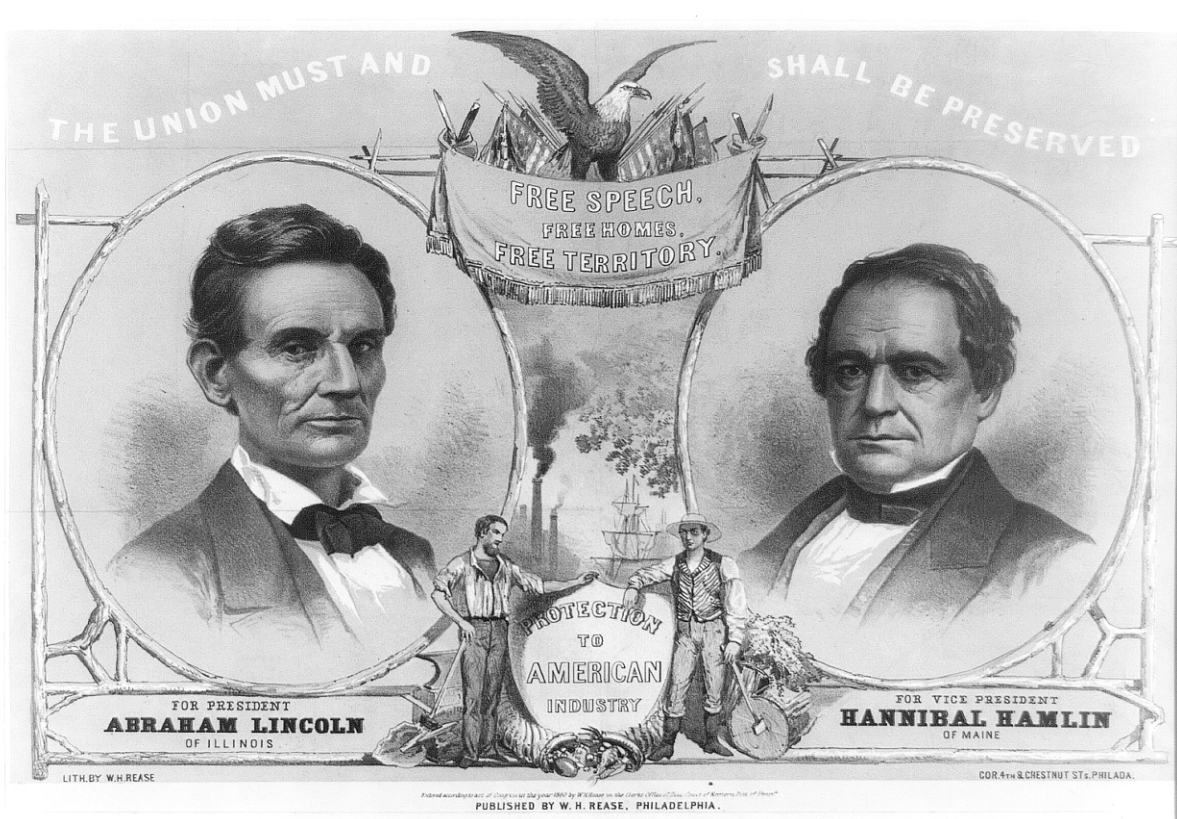


Fig. 6: Banner (REASE 1860) from the presidential election campaign in 1860 presenting ABRAHAM LINCOLN and HANNIBAL HAMLIN as the Republican candidates for president and vice-president of the United States. At that time ELLEN S. TUPPER's father NOAH SMITH JR. was campaigning in Iowa supporting the Republican election efforts. Source of Image: Library of Congress Prints and Photographs Division Washington, D.C. 20540.

Abb. 6: Banner der Kampagne des Präsidentschaftswahlkampfes im Jahr 1860 mit Portraits von ABRAHAM LINCOLN und HANNIBAL HAMLIN als republikanische Kandidaten für das Amt des Präsidenten und Vize-Präsidenten der Vereinigten Staaten von Amerika. Zu dieser Zeit war ELLEN S. TUPPERs Vater NOAH SMITH JR. auf Wahlkampfveranstaltungen in Iowa unterwegs um die lokalen republikanischen Wahlkampfbestrebungen zu unterstützen. Bildquelle: Library of Congress Prints and Photographs Division Washington, D.C. 20540.

According to her recollections, at least at that time she had indeed a rather experimental scientific interest in apiculture: *“There is always something to think about, some experiment to try, something to investigate. In short I find an intellectual as well as physical employment”*, she wrote (TUPPER 1867a, p. 101; see also REED 1992).

In 1861, shortly before the outbreak of the Civil War, ELLEN S. TUPPER started to write on beekeeping for the first time. Her opening articles appeared as a small series printed anonymously in a local newspaper, *“The Burlington (Weekly) Hawk Eye”*⁶⁷ in Burlington, Iowa.⁶⁸ A short editorial introduced the articles, praised the anonymous author as a *“Lady of this State, who understands the subject thoroughly”* and suggested her articles to their *“lady readers”* to *“read them carefully”* and to preserve them for *“future reference”* (ANONYMOUS 1861a, p. 1). It is highly remarkable that her very first article tried to show that the *“Care of bees appropriately belongs to women”* (TUPPER 1861a, p. 1).⁶⁹ Apparently, a longer and more extensive series had been planned, yet the last of her bee letters was written on the 23th April 1861. With the Civil

War in full motion, those plans seem to have been dropped. The newspapers now certainly had more important and eminent topics and events to cover.

Throughout the Civil War, ELLEN S. TUPPER continued her beekeeping business and she also undertook another attempt of publishing her ideas. Her articles on beekeeping in the "Burlington Hawk Eye" attracted the attention of WILLIAM DUANE WILSON (1809–1877)⁷⁰, the Secretary of the Iowa State Agricultural Society, who invited ELLEN S. TUPPER to write an essay for the forthcoming report of the society (TUPPER 1862; HARRISON 1870). This report was originally printed in the "Iowa Homestead", where WILLIAM D. WILSON then was working as editor (TUPPER 1862; HARRISON 1870). She soon became an "assistant editress" (TUPPER 1867g) writing about bee-culture and including topics such as "Bee-Keeping in the West", "Honey Resources", and "Storing of Surplus Honey" (TUPPER 1863, 1864b–g, 1867g, 1867t–w).

In 1862 she submitted the essay on bees to be presented at the Illinois State Fair held in September that year, with which she won the first prize, a Diploma and ten dollars. The 23-page long essay was later printed in the Ninth Report of the State Agricultural Society in Des Moines, Iowa (TUPPER 1864a). At the end of the essay she especially encouraged women and young people "to become theoretically and practically acquainted with this interesting and most profitable branch of husbandry" (TUPPER 1864a, p. 234). In the following years several further reports on beekeeping written by ELLEN S. TUPPER would appear in those State reports (TUPPER 1864h, 1865g, 1871e).

Once more on the advice of WILLIAM D. WILSON she was selected to prepare two essays on beekeeping for the United State Agricultural Report for 1865 (HARRISON 1870; see also TUPPER 1866a, 1868e), for which she received a governmental approbation in the form of a 300\$ cheque (ANONYMOUS 1873n). The Report for 1865 was a large-scale printing operation and overall 180,000 copies were produced and distributed.⁷¹ Several of her essays were reprinted in the following years, including for example republications that appeared in the "British Bee Journal" (TUPPER 1876d–e, 1877a–b).

Recollections of noted woman beekeepers illustrate vividly how those essays motivated women to become bee-keepers and how this could sometimes lead to funny consequences in domestic affairs, too (ROOT 1891). For example, many years later, LUCINDA HARRISON (1831–1904)⁷² remembered how the essay had drawn her attention to beekeeping:

"In 1871, while perusing the reports of the Department of Agriculture, I came across the flowery essay on bee culture from the graceful pen of Mrs. Ellen S. Tupper. I caught the bee-fever so badly that I could hardly survive until the spring, when I purchased two colonies of Italians of the late Adam Grimm. [...] I bought the bees without my husband's knowledge, knowing full well that he would forbid me if he knew it, and many were the curtain lectures I received from purchasing such troublesome stock. One reason for his hostility was that I kept continually pulling the hives to pieces to see what the bees were at, and kept them on the war path. [...] Meeting with opposition made me all the more determined to succeed. [...] I never wavered in my determination to know all there was to know about honey-bees: and I was too inquisitive, prying into their domestic affairs, which made them so very irritable" (ROOT 1891, p. 338–339).

8. First work as an editor at the Prairie Farmer and the Rural Gentleman

By the mid-1860s ELLEN S. TUPPER possessed around 100 beehives. (ANONYMOUS 1867g). Those hives, which she had neatly painted in white colour, were dispersed around her farmhouse and nicknamed by some of her contemporaries "Beetown" (ibid.).

In February 1865, the Civil War was still ongoing, ELLEN S. TUPPER wrote an article under the title “Notes on Honey and the Honey Bee” for the local “Washington Press” (TUPPER 1865h). The article was an immediate success and she soon received many letters with enquiries (TUPPER 1865j). Her article thus turned into a serial, where she tried to answer received letters. This style would be used by her for the next ten years in many of her further publications. Some of the topics that were covered by her, such as the benefits of moveable frames and those of Italian bees, became a common theme in her future works. Her articles in the “Washington Press”, which have not been mentioned in any of the previous short-biographies of ELLEN S. TUPPER, appeared throughout the whole year of 1865 in 12 numbers (TUPPER 1865h–r). Some of them were reprinted by other newspapers. When ELLEN S. TUPPER noticed this and discovered that the “Davenport Gazette” had mistakenly stated that this text had been written by a “Mr. Tupper” she was rather not amused and replied in the “Washington Press”: “*Take off your hat and apologize, Mr. Gazette, it is Mrs. E. S. Tupper that writes those articles, and has had more experience in Bee culture probably than any Mr. you could name in the State*” (ANONYMOUS 1865, p. 3).⁷³

A new opportunity arose for ELLEN S. TUPPER when the magazine “The Prairie Farmer”⁷⁴ engaged her to become the “Special contributor on bee subjects” (TUPPER 1865a–e, 1866b–v, 1867a, c, h–s, 1868b–c). The very first notion of this engagement highlights the strict path of self-promotion ELLEN S. TUPPER would follow in the years to come, as a strong endorsement for her work was published along with the above announcement. This commendation came in form of a letter from the bee expert SAMUEL WAGNER (1798–1872)⁷⁵ to a NOAH SMITH at the Office of Secretary of the U.S. Senate:

“The publishers of the Prairie Farmer will be fortunate if they can enlist Mrs. Tupper as a contributor to their paper. Her communications on bees and bee culture will undoubtedly be in accordance with the present state of our knowledge on the subject, as she is fully posted in the Dzierzon theory⁷⁶ and practice – beyond which there is little to be learned, needful to make an apiary a source of pleasure and profit. I know of no writer in this country who could present the topic in a clearer manner, or in more engaging and popular style.

Respectfully yours,

Samuel Wagner.

Late Editor Bee Journal”

Readers were given no indication why such a letter had been written or why it had come into the hands of “The Prairie Farmer” and, not surprisingly, no information was given to indicate that the recipient NOAH SMITH in fact was the father of the commended ELLEN S. TUPPER. Neither was it revealed that NOAH SMITH and SAMUEL WAGNER were both clerks in the office of the United States Senate at the time.

ELLEN S. TUPPER eventually started her work for “The Prairie Farmer” in December 1865 and it continued at least until 1869. During that time her name always featured prominently on the cover page of the magazine. In “The Prairie Farmer” under a column called “Chapters on the honey bee” she continued to write about experiences in her apiary, the natural history of bees and bee management. She promoted the use of Italian bees and moveable comb hives, but also reflected on beekeeping as an interesting profession for women. The journal published positive replies to her views, although it must remain doubtful, at least in some cases, whether all of those were genuine or were also written by ELLEN S. TUPPER. For example, a lady called MINNIE C.B.” from Cambridge in Illinois praised “Mrs. Tupper, for her opportune suggestions concerning bee-keeping” in a published letter, in which she linked TUPPER’s articles to two characters from CHARLES DICKEN’S novel “David Copperfield” (ANONYMOUS 1867b, p. 301):

“That such labor might have an important bearing upon the existing and ever increasing demand of women for employment is quite evident, even to the most obtuse intellect.

I am one of the thousands of the unfortunate sex, who have been, like Micawber⁷⁷, ‘waiting for something to turn up,’ and since reading Mrs. Tupper’s letter in the Farmer, I think I shall be perfectly safe in exclaiming ‘Eureka.’

If poor Micawber could have had a Mrs. Tupper to initiate him into the hidden mysteries of the apiary, he need never have gone to Australia, but could have possessed himself to a few colonies of those ‘artists’ in wax and honey, and ‘Emma’ though ‘fragile,’ and ‘necessarily a female’, might have assisted him in the business. Every one who has ever given the subject a thought must agree with Mrs. T., in thinking that such employment would be particularly adapted to the physical abilities of women, and as for their mental capacities, they are equal to almost any ‘emergency’.”

Another anonymous article in “The Prairie Farmer”, probably written by MATHIAS L. DUNLAP (1814–1875)⁷⁸, is a key document of its time. It illustrates the changing perspective of the early feminist movement regarding its relevance for rural communities (ANONYMOUS 1869a). Under the title “SOROSIS ON THE FARM”⁷⁹ it was highlighted “*that women are thoroughly and in earnest demanding new avenues of employment*”, but that there was no general agreement about which employments they should engage in (ANONYMOUS 1869a, p. 121). For instance, it was argued that the learned professions and political offices were too crowded and that the present members were “*generally adverse to encouraging women to engage in them*” (ibid.). On the other hand, there was one profession in which such limitations did not exist: Farming. Therefore, different activities such as beekeeping, poultry raising, husbandry or gardening were listed as appropriate activities for women. ELLEN S. TUPPER herself was personally mentioned and acknowledged as an authority on beekeeping and a positive example of a woman that had found employment in agriculture. In the concluding remarks, the article referred to several horticultural societies that had started not only to accept women as members but had also opened positions such as Secretary and Treasurer for female members.

ELLEN S. TUPPER’s work in the “Prairie Farmer” seems to have ceased with the year 1869. Yet several years later LUCINDA HARRISON, who had been infected by MRS. TUPPER’s “bee-fever”, took over “The Apiary” section of the journal and became an associate editor herself (i.e. HARRISON 1886; 1889; 1890).

During the mid and late 1860s ELLEN S. TUPPER continuously tried to expand her editorial and writing activities. Between the years of 1865 to 1867 she published a few additional articles in the local “Burlington Hawk-Eye” (TUPPER 1865s, 1866w–x, 1867x) and by the summer of 1867 she also started to work as “editress” for “The Rural Gentleman”, a then newly formed agricultural journal (see for example TUPPER 1867b).⁸⁰ Later she was also a regular contributor to other magazines and newspapers such as the “New York Tribune” and “Colman’s Rural World” (ANONYMOUS 1873a, ANONYMOUS 1873f) and other agricultural journals such as “The American Bee Journal and Gazette”, the “North Western Farmer” and “Hearth and Home”⁸¹ (see TUPPER 1867e–f, 1868d, 1869a–f, 1869a–d).

Her texts were typically articles, short columns and replies to letters received. Some of those quite vividly provide a picture of ELLEN S. TUPPER, who was happy to provoke and liked to use witty and harsh comments. For example, in a letter written by a Mr. ADAIR⁸², he questioned her assumption that it would take the production of 25 pounds of honey to create one pound of wax (ANONYMOUS 1867a). His argument was that it would take much less corn fed to a hog to produce one pound of lard. In her reply she did not mince matters and wrote: “*It has always been a rule with me, and one that I think might be safely adopted by Mr. Adair, ‘to be sure to know for the*

contrary,' before disputing facts, established by scientific men for a century, and proven again and again by costly experiments made for the purpose of other naturalists, who would have been glad to establish, if possible, some new theory." She continued with a sharpened pen that "Mr. Adair candidly admits that he 'knows nothing about it,' and his communication clearly shows that he is correct in his admission. [...] Mr. Adair's comparison of the bee with the hog is too absurd to be worth discussing", which she then did anyhow, ridiculing the question further by adding "[...] Let any one imagine a hog flying through the air, or a thousand hogs hung together by the legs as bees are strung, in secreting wax, and the absurdity is apparent" (ANONYMOUS 1867a, p. 260).

ELLEN S. TUPPER's work at the "*Prairie Farmer*", however, was not limited just to articles and correspondence. From 1867 onwards at the latest she became one of the first beekeepers in the United States who sold Italian queens, which became popular in the 1850s and 1860s (see OERTEL 1980). They were obtained by other apiarists such as CHARLES C. MILLER (1831–1920)⁸³, who later recalled that he had received his first Italians directly from TUPPER (MILLER 1903), yet it remains somewhat of a mystery where she obtained those first Italian queens herself. The price for a queen from ELLEN S. TUPPER at that time was 10 \$ (MILLER 1903). But TUPPER also started selling complete beehives in combs, which she advertised for 25\$. Soon she also used the magazine "*Prairie Farmer*" to establish a small business selling Italian queens by small advertisements placed in the magazine.⁸⁴ Similarly, advertisements under the title "MUCH IN A LITTLE" were published under the name of her husband ALLEN TUPPER selling the "Bee Keeper's Text Book" for then 40 cents.⁸⁵ The name of her husband was also used to sell complete moveable comb hives as an agent of "The American Bee Hive Company".⁸⁶ Hives then were strictly sold by either using depots or shipment via steamer on the Mississippi on request.

Editorial work and advertisements were not always clearly separated as she sometimes used the Questions and Answers section of the journal itself to promote her business. A typical example can be found in an anonymous reply to a reader who asked where one could obtain Italian bee queens in Stephenson County, to which it was replied that they are "*advertised by Mrs. E.S. Tupper, Brighton, Iowa, also by several other in the Farmer*" (ANONYMOUS 1866c, p. 108).

In retrospect, some of the advertisements placed by ELLEN S. TUPPER at that time are, even though very short, quite telling. They show for example that she had no inhibitions about making grand claims that misled the audience if she thought them helpful. For instance, as early as in 1866 she advertised her Italian bee queens as "*fully tested*" and warranted as "*pure*" even though there was no reliable method at the time to do so (ANONYMOUS 1866d, p. 142). Some of her advertisements even insinuated that her queens were not of American origin, stating that they were "*equal in all respects to any reared in the United States*", but at least at that time, there was no way that she could have obtained them directly from outside the United States (ibid.).⁸⁷ The issue soon led to an extensive dispute in "*The American Bee Journal*" and the "*American Bee Journal and Gazette*" (see ANONYMOUS 1866b, KLEINE 1866, GRIMM 1867a–b; TUPPER 1867d, VARRO 1867). ADAM GRIMM (1824–1876)⁸⁸, a well-respected bee-keeper at the time took offense to a statement that ELLEN S. TUPPER had made in "*The Prairie Farmer*". There she wrote in this regard that she "*cannot consider an Italian queen pure whose royal daughters are not duplicates of herself*" (GRIMM 1867a, p. 228). To investigate the matter, he travelled to the TUPPER farm and inspected her beehives while she was absent, whereby he found that her Italian bees did not vary from those he had raised himself (ibid.). He was especially interested, if there were pure queen bees, which only produced exact replicas, as it had been suggested in a letter on purity published by the German beekeeper GEORG KLEINE (1806–1897) earlier in the year (GRIMM 1867a; KLEINE 1866). TUPPER reacted to this criticism, and while acknowledging the existence of a general variation in colour of the bees, remarked that this was by no means a discrepancy, but that an "*Italian queen, purely impregnated will produce queens like herself*" (TUPPER 1867d, p.

34). Her reply is interesting as it proves that at the time she was trying to run a selective breeding project. If a queen did not produce queen offspring with the desired characteristics it was excluded (ibid.). Amazingly ELLEN S. TUPPER at the time tried to discretize her observations, while GRIMM focussed on continuous differences and variation. To some extent the discourse therefore resembles the Biometric-Mendelian-Debate, in which similar arguments were raised shortly after the rediscovery of the Mendelian Laws in 1900.⁸⁹ Yet, with the complexity of honey bee genetics, the typical mating of queen bees in flight and the existing difficulties in establishing techniques for artificial queen fertilization or fertilization in confined spaces, there was no way to find a final answer to those questions in 1867. One interesting observation ELLEN S. TUPPER made during those years though was the potential of hybrid vigour in hybridized bees and queens. Additionally, she also considered that there were differences in hereditary traits of character originating from female and male bee parents.

The experiments ELLEN S. TUPPER was describing then, unfortunately without any further quantitative details, were ahead of her times foreshadowing the age of classic genetics, which in the early days after the rediscovery of MENDEL's Laws saw a revived interest in the concept of pure lines in breeding contexts (BONNEUIL 2016). The topic was intensely discussed in the American bee literature of the 1870s.

The discourse soon afterwards changed the focus towards the question of artificial fertilization. ELLEN S. TUPPER and several others of the American beekeepers in the late 1860s realized that fertilization experiments under controlled conditions were needed to find an answer to the mechanisms of heredity in bees. ELLEN S. TUPPER was the first who claimed to have been successful at fertilization in confinement (GRAVENHORST 1871a; WAITE 1871). Even her closest scientific competitor in this regard, L.C. WAITE, who had claimed success in artificial fertilization by surgical operations, acknowledged the relevance of TUPPER's experiments. On an annual meeting of the "*State Horticultural Society of Missouri*" he reported that in his opinion her discovery was "*next in importance to the moveable-comb hive, the greatest improvement ever made in bee-culture*" (WAITE 1871).

Yet her reports on pure queens were received by many beekeepers with large scepticism, some even believing that all this was humbug. A final judgement on the issue even in retrospect is highly difficult. Her reports on the topic itself do not provide enough details and they have never been fully reported as the process was intentionally kept as business secret (see GALLUP 1868). Nevertheless, she shared her methodology, which she claimed to have used for the fertilization of hundreds of queens, with fellow beekeepers and some of them confirmed her results and observations, whereas others failed (GALLUP 1868; ANONYMOUS 1917). Attempts to replicate her cage confinement approach in the age of classical genetics in any case seem to have failed, and apiarists at that time remarked that it was a valid question "*whether she was deceiving herself or trying to deceive others*" (ANONYMOUS 1917).

Ironically the "Tupper method" for fertilization procedure also led to a priority dispute that involved both ELLEN S. TUPPER and a Hungarian bee-keeper, a fact which garnered even international attention (GRAVENHORST 1870, 1871a-b; WAITE 1870a-b, 1871; SEMLITSCH 1871, 1872, 1874; RUTRICH 1873).

Geneticists in the 20th century eventually came up with better defined methods, which allowed them to investigate Mendelian and Non-Mendelian heredity in bees for artificial crossings observing individual characters (NOLAN 1929, 1937; WATSON 1928; NOLAN 1929, 1937; KALMUS & SMITH 1948).

In March 1869 ELLEN S. TUPPER became an editor for “The Bee Keepers’ Journal”⁹⁰ and, then editor under the newly consolidated title “The Bee-Keepers’ Journal and National Agriculturist”⁹¹, which was published and co-edited by HOMER ARTHUR KING⁹² (see Fig. 7). It was structured as an innovative approach to a new illustrated journal that tried to provide articles on a broadened range of topics, to make it more attractive for a wider audience. This meant that it included five departments for articles, including “Bee-Keeping”, “Agriculture”, “Home and Fireside”, and a “Ladies’ and Youth’s” department (ANONYMOUS 1869g).⁹³ Announcements of the journal did not only include a general introduction of the new journal with ELLEN S. TUPPER featuring as an editor promoted as “*America’s most distinguished lady writer on bee-culture*”, but also a teaser for the January issue, which would contain a biographical portrait of her, raising her to the same standing as other well-known European and American apiarists such as HUBER, BERLEPSCH and DZIERZON, whose portraits were presented in the following issues of the magazine (ANONYMOUS 1869g, 1870a). One of her jobs for the journal at that time was to translate “*articles on bee culture from the German journals of the Old World*” (ANONYMOUS 1871b, p. 157). In this capacity she was supported by Miss LYDIA C. TUPPER⁹⁴, who also worked for the journal.

Over the following years she was a frequent contributor on bee-keeping in the journal (TUPPER 1869g-z, 1869aa-ac, 1870e-t, 1871b-d, 1872d-f). During those years ELLEN S. TUPPER also started an extensive correspondence with German bee-keepers. Among them was AUGUST VON BERLEPSCH (1815–1877), a famous apiarian, with whom she communicated through letters that she exchanged with his wife LINA FREIFRAU VON BERLEPSCH (1829–1899), who translated American novels into the German language. That is how the idea of women having a role in science, scientific societies, bee-keeping and higher education arrived in Germany in the early 1870s, where LINA VON BERLEPSCH started to support the cause.

One additional issue that ELLEN S. TUPPER started to address in “*The Bee Keepers’ Journal*” was early child education and that parents should take their time to play with and read to their kids. One noteworthy example is an article written by her, in which she fondly remembered the time, when one of her brothers in the 1830s had read to her from Cooper’s “*Last of the Mohicans*” (TUPPER 1869y).⁹⁵ However, it was particularly the education of girls that was close to her heart. When a correspondent from Missouri argued in a letter that he liked the journal’s “*Ladies’ Column*”, because of its position in *teaching women how to work and to make their labor profitable*, that women had “*been educated too much*”, and that the “*ancestor’s idea that a woman need only to have schooling enough to be able to read and sign her own name was a better extreme than the modern one of teaching a girl everything out of the books, but nothing about every-day life*”, she used her correspondence space for her own rather furious reply. In her response she expressed her view a girl should not be called educated because she possessed “*a little knowledge of the -ologies, a smattering of French and a superficial knowledge of music*”, but that girls should instead be taught as much and as thoroughly as possible, and while teaching in household matters might be helpful, those issues were much less important than the objective to make women independent. In fact, she emphasized that doing so would surely prevent many of them to “*form that unholy alliance which is so often made – a marriage without love, for the sake of support!*”. Her remarks ended with a rather prophetic outlook: “*The time is coming fast when all doors will be thrown wide open, and women allowed and encouraged to do anything, that they are fitted to do well. We have only to prepare our girls to do something, and do it ‘with the*

spirit and understanding also'. What that something shall be, let Providence and their own choice decide."



Fig. 7: 150th Anniversary of women as editors in entomological journals. Frontispiece header of “The Bee-Keepers’ Journal and National Agriculturist” from January 1870, the issue which contained the first biography of ELLEN S. TUPPER together with an engraved portrait of her.

Abb. 7: 150 Jahre Frauen als Redakteurinnen in entomologischen Magazinen. Titelgrafik des „Bee-Keepers’ Journal and National Agriculturist“ vom Januar 1870 aus der Ausgabe welche, zusammen mit einem Portrait (Kupferstich), die erste Biografie zu ELLEN S. TUPPER enthielt.

9. Iowa State Politics and the early suffragette and temperance movement

Although ELLEN S. TUPPER herself was not involved in the State politics in Iowa, her further career and life was to be strongly influenced by it. This makes it necessary to give a short introduction to Iowan politics after the Civil War as well as to some of the key figures involved in those developments. Women’s suffrage, the temperance movement, expansion of the agricultural colleges and education in general, as well as land sales and thereby recruiting new pioneers, were at the heart of the debate during the following decade. In the period from 1865 to 1867 the topic of “women’s suffrage” was occasionally mentioned in newspapers first.⁹⁶ However, the topic only gained a wider traction when some prominent female society members started to support the idea, particularly careful at the beginning (NOUN 1969; NOUN & BOHLMANN 2002). One of them was ANNA SAVERY nee NOWLIN (1831-1891)⁹⁷, typically called ANNIE, who was then a wealthy businesswoman. She and her husband JAMES C. SAVERY (1824–1905) had moved from New York to Des Moines in Iowa in the early 1850s where they started “The Savery”, which would become the most prestigious Hotel of Des Moines and practically the whole of Iowa (ANONYMOUS 2000). It soon was a luxurious melting pot for politicians of local and national prominence, lobbyists and journalists. The hotel was managed by ANNIE SAVERY. With their involvement in the “American Emigrant Company”⁹⁸, which sold State and Indian lands to new immigrants from Europe and particularly Scandinavia, the couple was able to make their fortune (ANONYMOUS 1869; SWIERENGA 1968; NOUN & BOHLMANN 2002). Around 1866 ANNIE SAVERY became interested in philanthropy and supporting free public education (ibid.). In 1866 she gave money to the local “Des Moines Library Association” and more significantly established a 20-year scholarship program for women at the Iowa College in 1868 (ibid.). This engagement, however, was interrupted by two extended trips to Europe in the years 1866 and 1869, which she undertook with her husband (ibid.). On one of those trips they were introduced as part of an American delegation to the court of the French Emperor LOUIS NAPOLEON BONAPARTE (1808–1873) (ibid.).⁹⁹ When they returned, ANNIE SAVERY made her debut on the lecture stage. In benefit of JOSEPH M. DIXON (1825–1883), a former newspaper editor who had lost his eyesight,

she reported on her journey to Europe under the title "*From the Tuileries to the Forum*" (ibid.). Another consequence of this trip was that ANNIE SAVERY managed to import several Houdan chickens from the Zoological Garden and the related Acclimatization Society in Paris (ANONYMOUS 1872h-i). Some of those birds seem to have been given to ELLEN S. TUPPER'S youngest daughters, who started their own breeding program with them.¹⁰⁰ At the latest by 1868 ANNIE SAVERY got into contact with SUSAN B. ANTHONY (1820-1906) and ELIZABETH CADY STANTON (1815-1902)¹⁰¹, two of the then most prominent and leading American suffragettes of the time (NOUN 1969; NOUN & BOHLMANN 2002). When the "National Woman Suffrage Association" was established in New York in May 1869 by SUSAN B. ANTHONY and ELIZABETH CADY STANTON, ANNIE SAVERY as one of the vice-presidents was one of its founding members (ANONYMOUS 1869b). SAVERY started to support ANTHONY'S and STANTON'S woman suffrage magazine "The Revolution", for which she was acting as the Iowa agent, and soon she was also giving lectures on the subject of woman suffrage (NOUN 1969; NOUN & BOHLMANN 2002). Her first lecture on the subject, held in January 1868 in the Des Moines courthouse, was given under the title "*Angels and Politicians*" (ibid.). ANNIE SAVERY soon afterwards started a correspondence with AMELIA BLOOMER (1818-1894), another important suffragette, trying to initiate a Woman Suffrage Conference in Des Moines for 1870, in a year when the state congress was held, thus allowing to put the matter before the State Legislature (ibid.). However, problems in the organization prevented this ambitious idea (ibid.). Nevertheless, SAVERY continued to give talks on the matter, and despite occurring problems the question was discussed in the Iowa state legislature. In June 1870, when the "Iowa Woman Suffrage Association" was formed at Mount Pleasant, SAVERY was elected as corresponding secretary responsible for calling a woman suffrage meeting at Des Moines (ibid.).

In the summer of 1870 SAVERY, inspired by ELLEN S. TUPPER, became interested in beekeeping (NOUN & BOHLMANN 2002). Even though at that time she "*hardly knew a bee from a yellow jacket*", she purchased 10 colonies from ELLEN S. TUPPER and started her own bee production business that was quite profitable (see Appendix 2).¹⁰² By mid-1871 the stock had already increased to 37 colonies and SAVERY reported on her progress during this time in the "Iowa Progress" (NOUN & BOHLMANN 2002). Eventually in November 1871 ANNIE SAVERY and ELLEN S. TUPPER decided to start a larger enterprise under the name "The Italian Bee Company" (ibid.). The idea behind this company was that the Italian bees were more productive, and stocks increased faster (ibid.).¹⁰³ Consequently, Italian bee queens were in high demand at that time. Even before 1870 ELLEN S. TUPPER had started to trade with Italian bees on her own. However, the scope of this project was still quite limited and ELLEN S. TUPPER herself was not involved as it seems in any direct importations from Europe. With ANNIE SAVERY'S help it was planned to upscale the project and directly import bees from Lake Como in Italy (NOUN & BOHLMANN 2002). ANNIE SAVERY therefore provided "*abundant capital*" for the company in form of a 10,000 \$ investment, while ELLEN S. TUPPER was primarily responsible for the know-how and expertise (ANONYMOUS 1873a; NOUN 1977; NOUN & BOHLMANN 2002). The company hives were stored at SAVERY'S home and hibernated in her cellar. The business operation had to face several problems though. During transport many bees were lost, and TUPPER and SAVERY blamed the careless packaging on the Italian side (NOUN & BOHLMANN 2002). Importation thus was very expensive, and so they decided to finance CHARLES DADANT (1817-1902), a beekeeper from Illinois, to undertake a trip to Europe (ibid.). DADANT went to Italy in July 1872 (ibid.). The trip, unfortunately, was a big failure. Despite careful attention paid to packaging, most bees died on the journey to America, and the company was only able to complete a small fraction of the ingoing orders.

Gossipy newspaper articles from the early 1870s highlight how the two businesswomen soon had become somehow notorious members of the Iowa community.

The “*Dubuque Herald*” and the “*Davenport Democrat*” for example reported on the “*feminine inkslingers of Iowa, from which it appears that our State is second to none in the prominence of its ladies suffering from the cacoethes scribendi*” (ANONYMOUS 1873m, p. 1). ELLEN S. TUPPER was described at that time as “*plain, practical, pious, caring but little for the vanities of life, but full of honey and money making, fifty at least, and caring not who knows it*” (ibid.) and “*looking as though she cared not a button for anything in the universe outside her work among the beehives*” (ANONYMOUS 1873n, p. 2).

ANNIE N. SAVERY, on the other hand, was labelled as “*quite another sort of woman, handsome, delighting in rich silks, dainty laces, and becoming jewels, and a fine display of these toilette articles on a very fine looking form [...] not to be lost sight of even when she mounts the reformation rostrum and discourses thereon of women’s rights to everything in general and the ballot-box in particular [...]*” (ANONYMOUS 1873m, p. 1).

Meanwhile both ELLEN S. TUPPER and ANNIE SAVERY were quite active in promoting the company not only by advertisements but also with reports written for newspapers. Additionally, SAVERY joined ELLEN S. TUPPER as a lecturer¹⁰⁴ on bees, with SAVERY particularly focussing on beekeeping for female beginners.

10. First female lecturer on apiculture in the Iowa Agricultural College and first female vice president in an entomological society

In 1870 ELLEN S. TUPPER became more involved within the American Beekeeper’s societies. In December 1870 the “North American Bee-Association” held a convention in the House of Representatives in Indiana. At that meeting ELLEN S. TUPPER, together with other internationally renowned beekeepers such as JOHANN DZIERZON¹⁰⁵, ANDREAS SCHMIDT¹⁰⁶, and SAMUEL WAGNER, was admitted as an honorary member to the society (NEWMAN 1886). However, this organization was only short-lived, and it was decided to join the efforts of the major societies. Thus, a year later, in the morning of St. Nicolaus day 1871 the two largest apiological societies in America, the “North American Bee Keepers’ Association” and the “American Bee Keepers Association” met in the Temperance Hall of the City of Cleveland.¹⁰⁷ In a joint session presided over by the then vice president of both societies, REV. W. F. CLARKE (1824–1902)¹⁰⁸ from Ontario, it was unanimously decided that both entities should be dissolved to be united under a new name. In the afternoon, the new society was chartered under the title “North American Bee Keepers’ Society” with the objective to “*promote the interests of bee culture*” (ANONYMOUS 1872j, p. 1).¹⁰⁹ Its membership was open to everybody and only required payment of a membership fee of 1 dollar.¹¹⁰ Ladies, however, were explicitly admitted free of charge.¹¹¹ From the list of members published inside the proceedings it is clear that at least 32 ladies¹¹² made use of this offer. For that time this was a remarkably large number. With a total membership of 239 more than 13% were thus women. The large female attendance was already prepared long in advance. Ladies had been especially invited and even before the conference it was expected from correspondence that many women would attend the meeting. Particularly a half-fare on railway tickets organized by Mrs. TUPPER and other leading members of the society ensured that many beekeepers could bring their daughters and wives along to this and a previously held meeting in 1871 (ANONYMOUS 1871f, 1871g).

While for most of those female attendees no biographical information is available, a few are worth a particular mention: One was ANNIE SAVERY, who had presumably arrived together with ELLEN S. TUPPER from Iowa. As business partner of TUPPER at the time she had already published several articles on practical beekeeping (ANONYMOUS 1872a). At the convention she was meant to give a lecture to a general audience on bee-keeping for beginners. Yet, when she entered the lecture hall it turned out that the local public had not been informed and mostly experienced

beekeepers were present. She thus changed the topic of her talk to a motivational speech to convince the “old bee-keepers” to encourage their wives and daughters to join them in their wonderful profession. Her surviving lecture is not only an interesting artefact in this regard, but it also gives a highly entertaining first-hand account on the early origins of the “Iowa Italian Bee Company” and how the latter was started by ANNIE SAVERY behind the back of her husband, assisted by ELLEN S. TUPPER (see Appendix 2.). Another commendable woman at the convention was a young lady named ELLA DUNLAP¹¹³, the daughter of Matthias L. DUNLAP from Champagne City, who at the time was a regular contributor to the “Chicago Tribune”. It was her father, then the elected Treasurer of the society, who had suggested the amendment of the society’s constitution, to admit the ladies free of charge. ELLA DUNLAP on the other hand actively participated in the meeting by taking the official notes of the convention (ANONYMOUS 1872b). A third notable woman at the conference was a Mrs. FARNHAM from Southbend (Indiana). She was presented at the conference as the inventor of a non-swarmer attachment, which drew much attention during the conference (MITCHELL 1872). The device was later promoted and sold by the “Italian Bee Company”, who acted as Mrs. FARNHAM’s agent in this regard (see TUPPER & SAVERY 1872).

A president was elected as an officer of the society, as were a secretary and a treasurer. Additionally, one vice-president for each State, district, territory or province represented was elected. This is how ELLEN S. TUPPER, as the vice-president from Des Moines, Iowa, became the first elected female officer of a national entomological society (ANONYMOUS 1872g). Inside the “Iowa Bee-Keeper’s Association” she held already since December 1870 the role of Secretary and Treasurer of the society (ANONYMOUS 1870b, 1871h; 1873d).

The meeting itself was widely reported and reviewed in the newspapers of its time. “The Prairie Farmer” for example noted:

“This was without doubt the most important and interesting apian meeting yet held in this country” (ANONYMOUS 1871d, p. 382).

Only a year later at the Second Annual Meeting of the “North American Beekeepers’ Society” two further women, MRS. A. C. HATCH from Mrs. TUPPER’s former hometown Houlton in Maine and MISS FANNIE L. NORRIS (1848–1937) from Alabama, would follow in ELLEN S. TUPPER’s footsteps and were also elected as vice-presidents (see ANONYMOUS 1873d). In the following two decades many further women joined the society. In 1893, not less than 59 women and girls were members (CUTTING et al. 1893).

In January 1872 the Second Annual Meeting of the “Iowa Bee Keepers’ Association” was held in the City Council chamber of Des Moines. When the “Committee on topics” met in the Court Room later in the afternoon and evening, MRS. TUPPER was one of the most active members reporting and commenting on various topics, particularly focussing on suggestions for beginner beekeepers and on possible methods to avoid swarming (ANONYMOUS 1872k). Other topics discussed by TUPPER at the meeting were the honey prices, of which she highlighted that she sold extracted honey at 25 cents per pound. One of the core topics under discussion, were the differences between the ordinary black bees and the Italian bees, with the general feeling expressed, of the latter being hardier and producing more honey at any given time (ANONYMOUS 1872k). This topic was further extended on the next morning, when TUPPER gave a lecture regarding “*the drone offspring of Italian queens fertilized by black drones*”, in which she reported from her own experiences that “*black drones produce as pure drones as when fertilized by an Italian drone*” (ANONYMOUS 1872k, p. 314). She went on that “*a pure queen, either Italian or black, will always produce pure drones. Hybrid queens will produce impure drones*” (ANONYMOUS 1872k, p. 314).

Both conventions held in the winter would prove to be very successful for ELLEN S. TUPPER. Her presentation seems to have been received quite favourably by the leadership of the Iowa Agricultural College and from 1872 onwards she acted as a non-resident lecturer on bee-keeping (ANONYMOUS 1873e).¹¹⁴ This development was certainly also a response to a resolution that had been adopted at the December meeting “North American Bee-Keepers’ Society”, and in which the appointment of an apiarian professor in each of the agricultural colleges of the continent had been recommended (ANONYMOUS 1871d).

On a more general level the conventions held then also had another important relevancy. They were used as a source and platform to gain and use political and economic influence. This became most apparent in 1872 when ELLEN S. TUPPER, MR. QUINBY and MR. MOON lobbied U.S. politicians not to extend a patent for the LANGSTROTH beehive, which was held by a competing beekeeper. ELLEN S. TUPPER in this context sent several letters from Senators and Representatives in Congress to the Bee-Keepers’ Journal and National Agriculturist, which ensured due to political support that it was “*next to impossible for Mr. L. to get his patent extended*” (ANONYMOUS 1872f, p. 28).¹¹⁵

In spring 1872 ELLEN S. TUPPER relocated to Des Moines where she had a home situated circa one and a half miles away from the heart of the city (Fig. 8). A year earlier her husband ALLEN had already moved to the north-western counties of the state, hoping to claim some new territory in the new lands of that region (ANONYMOUS 1871g).

Sometime in spring 1872 ELLEN S. TUPPER also became one of the editors of another magazine, the then newly established “Bee-Keeper’s Magazine”, which featured various articles to encourage women and children to become apiarists.¹¹⁶ The very first issue of the new magazine made it very clear that it primarily focussed much more on a female audience. For instance, the first issue contained a comparatively long story of a female bee-keeper from England¹¹⁷, a reprint of Mrs. TUPPER’s prized essay on bee-keeping that ended with the “Adaptation of the Business to Women” (TUPPER 1873a), and another article by ELLEN S. TUPPER on “Bee-Keeping for Ladies” (TUPPER 1873b). The latter was accompanied by a section of “Reports of Success in Bee-Keeping from Ladies” TUPPER 1873a; TUPPER 1873b). The magazine was widely promoted, including advertisements that ran in “Scientific American”¹¹⁸, clearly indicating that the magazine from its onset had not only aimed for a much broader audience, but particularly one which was also susceptible to the popularization of science. These intentions are also visible in other innovative editorial and typographical features of the magazine. Artistic engravings were used as illustrations in practically every issue and monographic initials were used throughout the journal to make it visually more appealing. Additionally, a deluxe version of the magazine was available, which could be ordered by subscribers that wanted to enjoy the colourful chromolithographs that were separately distributed together with the journal. The following issues soon contained a Ladies’ Department, and most noteworthy, it was, as far as we are aware, the first biological journal in which multiple women had become members of the editorial board.¹¹⁹

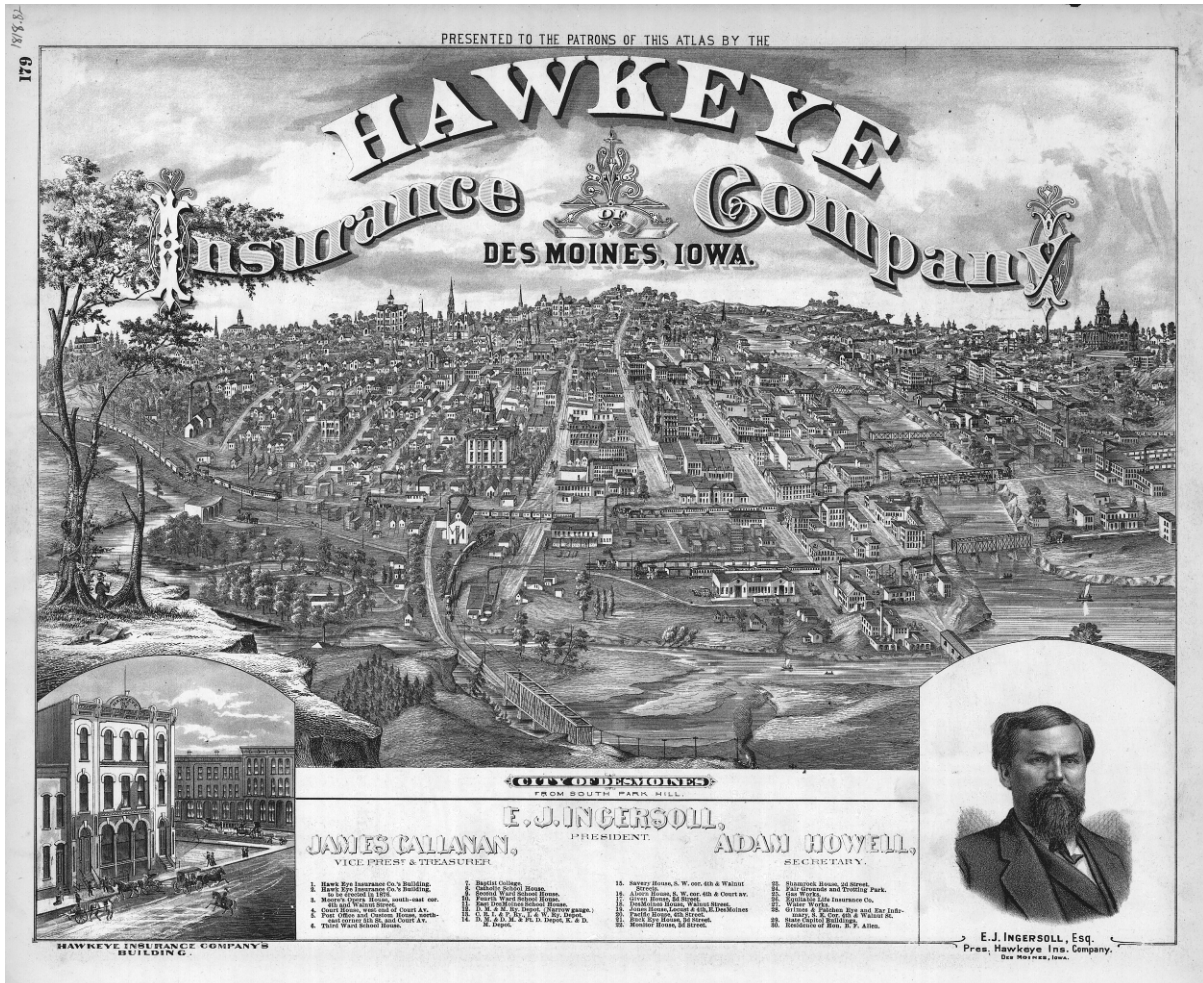


Fig. 8: 3D-overview of Des Moines (ANDREAS 1875), briefly after the time when ELLEN S. TUPPER relocated to the city and established the “Italian Bee Company” together with ANNIE N. SAVERY. The legend at the bottom of the map identifies by embedded numbers several landmarks of old Des Moines. The noted “Savery House”, however, is not the “Savery House” but the old “Savery Hotel”. The private home of ANNIE N. SAVERY, where the company originally kept its bees, is not shown on the map, because it had been destroyed by a fire. It was located along one of the bluffs of the Racoon River (river in the front), at the feet of the small hill on the left side of the engraving. ELLEN S. TUPPER’s Des Moines home and famous bee farm in the Cottage Grove was located behind that hill. The map in general illustrates Des Moines as a rapidly growing city with for its time modern features such as multiple railways, a telegraphic line, several steam-powered factories and a horse driven streetcar. Particularly the railways lines were important for the “Italian Bee Company”, which tried to upscale the Italian queen bee shipping business. (Source of Image: Library of Congress, Geography and Map Division; house locations were reconstructed from ANONYMOUS 1874y; NOUN 1969; NOUN & BOHLMANN 2002 and information that can be found in the “National Bee Journal”).

Abb. 8: 3D-Übersicht von Des Moines (ANDREAS 1875) kurz nach der Zeit als ELLEN S. TUPPER in die Stadt zog und zusammen mit ANNIE N. SAVERY die „Italian Bee Company“ gründete. Die Legende am unteren Bildrand identifiziert mit Hilfe von im Bild eingebetteten Nummern verschiedene Wahrzeichen des alten Des Moines. Das markierte „Savery House“ ist allerdings das „Savery Hotel“. Das private Heim von ANNIE N. SAVERY, wo die „Italian Bee Company“ ihre Bienen hielt, ist nicht mehr auf der Karte dargestellt, da es bereits von einem Feuer zerstört worden war. Das „Savery House“ stand nahe einer der Uferböschungen des Racoon River (Fluss

im Vordergrund), am Fuße des kleinen Hügels der auf der Karte am linken Rand zu sehen ist. Das Haus von ELLEN S. TUPPER befand sich hinter diesem Hügel im sogenannten Cottage Grove. Die Karte im gesamten zeigt Des Moines als eine damals rapide wachsende Stadt mit vielen für die damalige Zeit modernen Errungenschaften, wie beispielsweise das Vorhandensein mehrerer Eisenbahnlinien, einer Telegraphenstation, dampfbetriebener Fabriken und einer von Pferden gezogenen Strassenbahn. Insbesondere die Eisenbahnbindung war für die „Italian Bee Company“ von großer Wichtigkeit, um das Versandgeschäft von italienischen Bienenköniginnen auszudehnen. (Bildquelle: Library of Congress, Geography and Map Division; Die rekonstruierten Ortsangaben in der Bildunterschrift basieren auf ANONYMOUS 1874y; NOUN 1969; NOUN & BOHLMANN 2002 sowie Informationen aus dem „National Bee Journal“).

Beside TUPPER three other women, MRS. S.O. JOHNSON, MRS. P.C. ROYCE¹²⁰ and MRS. JULIA A. CARNEY¹²¹ were listed as “Special Contributors” on the magazine imprint and soon numerous further women appeared as authors in the “Ladies’ Department” of the journal. The magazine was a highly ambitious project that was clearly strongly influenced in its content by ELLEN S. TUPPER, who herself contributed extensively in writing for the magazine, including for example a continuously appearing bee calendar (see TUPPER 1873a–m). The contents of the magazine however were surprisingly versatile. Practically every issue contained a bee-poem written by one of the women contributors while other authors provided texts that were focussed on scientific questions and topics. Other topics, such as dresses for woman beekeepers, were also specifically focussed on a female audience.

The most charming aspect of the journal was that it undertook serious attempts to encourage and stimulate children to gain an interest in beekeeping and science in general. The core of these efforts was the introduction of “The Young Bee-Keeper” society. In every issue this department and club provided condensed lessons on Natural History, which were interestingly written, and tried to answer general questions, sometimes on morphology, sometimes on more practical aspects of beekeeping. To make reading for the young ones even more interesting, some of the issues contained early versions of comic strips drawn by the famous German artist WILHELM BUSCH (1832–1908)¹²² (see Fig. 9). The magazine, however, got even further and tried to establish a “Youth bee club” for boys and girls, who were specifically addressed to recruit new subscribers, for which they were promised if particularly successful to receive interesting incentives as for example a small Globe microscope.

Overall the magazine was quite a success with regard to recruiting women into beekeeping. There were quite a number of women who started to correspond with the journal or even contributed to it. As a matter of fact, even years later the old issues of the attractive journal attracted a new generation of woman beekeepers, who later reported on how they had become apiarists themselves (SHERMAN 1891).

The topic of woman beekeepers in any case has remained a favourite inside the bee literature ever since (e.g. SHERMAN 1891; HARRISON 1881; ANONYMOUS 1920, 1921; BALDENSPERGER 1918; CRANE 1999, p. 583ff.; HORN 2012; KING 1918; WILSON 1918; PELLETT 1917).

Meanwhile, the “Italian Bee Company” by ELLEN S. TUPPER and ANNIE SAVERY had run into significant financial troubles. There were several reasons for this. The main problem of the company was the severe losses of bee queens during transports from Europe to America. The unsuccessful importation prevented the company to become as profitable as the two women had hoped for. Furthermore, the honey business itself in those years became less profitable, too. Following the American Civil War sugar prices started to decline rapidly (ANONYMOUS 1962). Sometime between the summer of 1872 and January 1873, SAVERY and TUPPER went separate

ways.¹²³ ELLEN S. TUPPER later wrote that she had obtained SAVERY's share of the business for 3,400 \$.



Mounted, and without any trip
Got all the bees within the skip;—

Fig. 9: The adventures and mishaps of JOHN DULL trying to secure a swarm of bees from the German "Buz a Buz" by the German humoristic poet and illustrator WILHELM BUSCH were used in the Youth Department of the "Bee-Keepers' Magazine" to make the journal more appealing to a younger audience.

Abb. 9: Die Bildgeschichte der Abenteuer und Missgeschicke von JOHN DULL beim Sicherstellen eines Schwarms Bienen aus „Schnurrdburr oder die Bienen“ des deutschen humoristischen Dichters und Zeichners WILHELM BUSCH wurde in der Jugend Sektion des „Bee-Keepers' Magazine“ verwendet um das Magazin attraktiver für junge Leser zu machen.

In March 1873 ELLEN S. TUPPER's home including all her beehives burned down in a fire. Even though she had received 2,400 \$ from an insurance company, she herself was now in severe financial troubles. Her friend H.A. KING tried to support her with a call for support in the "American Bee Journal", but it was met with substantial criticism from other beekeepers. While there is no further specific information on the split between A. SAVERY and E. TUPPER, two letters written by ANNIE SAVERY show that the two women at the time still considered each other to be friends and had gone separate ways amicably (see Appendix 3). Nevertheless, it is not impossible, given the events of the following years that this changed soon afterwards.

11. A case example for the early suffragette movement

Her business endeavours as a beekeeper, particularly writing practical articles on bee culture and her work as a lecturer for the Iowa Agricultural College soon brought ELLEN S. TUPPER into further and closer contact with other branches of the suffragette movement. In autumn 1873 she visited the Iowa Agricultural College in Ames. While E. TUPPER gave her periodical lectures on bee-culture there, the suffragist MARTHA CALLANAN (1826–1901)¹²⁴ was invited to hold a Saturday evening lecture on "Woman's Lost Rights", which seems to have resulted in lively discussions (ANONYMOUS 1873g). A coverage of the joined return trip of ELLEN S. TUPPER and MARTHA CALLANAN towards Des Moines in the "Women's Journal" introduced ELLEN S. TUPPER into the core of the early suffragette literature for the first time (ANONYMOUS 1873g). The event

is also significant because it seems to indicate a shift of allegiances inside the suffragette movement. For some time, MARTHA CALLANAN had been the primarily established opponent of ANNIE SAVERY inside the Iowa suffragette movement. Part of this rivalry originated from the presidential election of 1871, in which SAVERY had defended the candidacy of VICTORIA WOODHULL (1838–1927)¹²⁵ for president of the United States, on the grounds that it was not helpful to split forces inside the suffragette movement (see Fig. 10.) (RILEY 1981; NOUN & BOHLMANN 2002).

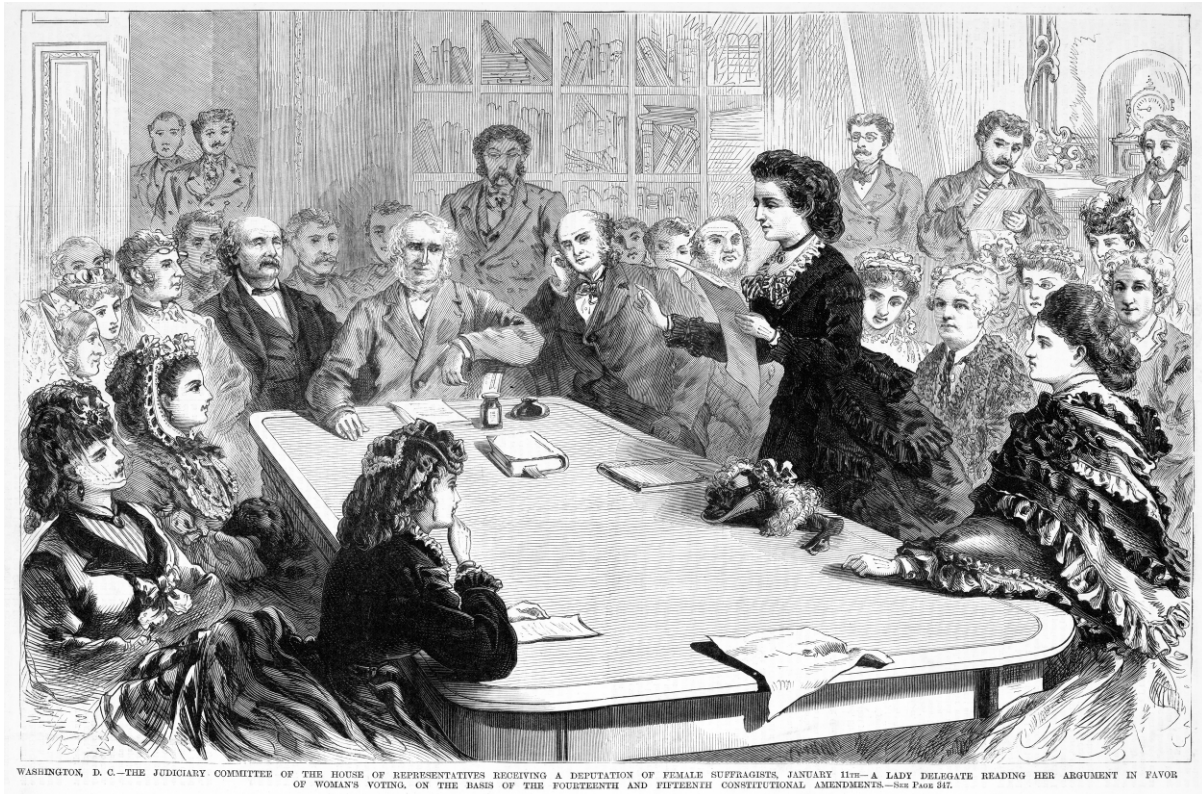


Fig. 10: Cartoon from “Frank Leslie's Illustrated Newspaper” from February 1871 depicting VICTORIA WOODHULL, the first woman who campaigned to become president of the United States of America (ANONYMOUS 1872I). WOODHULL at that time lobbied in Congress in favour of woman's voting, on basis of the Fourteenth and Fifteenth Constitutional Amendments. However, her Free Love advocacy was one of the reasons that led to major conflicts in the women's rights movement in general particularly among Iowan suffragettes. Source of Image: Library of Congress Prints and Photographs Division Washington, D.C. 20540.

Abb. 10: Cartoon aus “Frank Leslie's Illustrated Newspaper” vom Februar 1871 VICTORIA WOODHULL, der ersten Frau die für Amt des Präsidenten der Vereinten Staaten von Amerika kandidierte (ANONYMOUS 1872I). WOODHULL argumentierte zu dieser Zeit vor dem U.S. Kongress für das Frauenwahlrecht auf Basis des 14. Und 15. Verfassungszusatzes. Ihre kontroverse „Free Love“ Kampagne führte in den folgenden Jahren zu schwerwiegenden Konflikten innerhalb der Frauenrechtsbewegung im Allgemeinen und insbesondere unter den Suffragetten in Iowa.

aus Harper's Weekly von 1871 von VICTORIA WOODHULL, der ersten Frau die für das Amt des Präsidenten der Vereinigten Staaten von Amerika kandidierte. Bildquelle: Library of Congress Prints and Photographs Division Washington, D.C. 20540.

Even though she herself did not supported the “*free love*” movement associated with WOODHULL, she had come into serious conflict with MARTHA CALLANAN who despised the idea and had ensured a resolution against it (NOUN 1969, p. 177). The result of this was that SAVERY had become a “pariah” to some parts of the Iowa suffragettes while CALLANAN with more conservative views took over the lead for the greater part of the Iowa suffragette movement (ibid.; ANONYMOUS 1873i). Meanwhile, ELLEN S. TUPPER and some of her daughters apparently soon became more involved in the suffragette movement themselves, both on a local and national level. In October 1873, both the “Association for the Advancement of Woman” (AAW) and the “American Women Suffrage Association” (AWSA) held conventions in New York City. CALLANAN, and other Iowa suffragettes ensured coverage in local Iowa newspapers and the presentation of the meeting of the AWSA as well as their own local Iowa meeting (ANONYMOUS 1873h). Thereby they also gave support to the cause ELLEN S. TUPPER was promoting, liberating the access to education and professions for women. She was able to present to the public some first successes. When reports were published on the AWSA meeting for example, CALLANAN could add in an article on the “Political Advancement of Woman” that “*Iowa women are admitted to every educational institution on the same terms [as?] men*” and that “*women were members of the agricultural order*” (ANONYMOUS 1873h, p. 2). Meanwhile, ELLEN S. TUPPER and her daughter ELIZA TUPPER WILKES were elected vice-presidents for the AAW representing the States of Iowa and Colorado respectively (ANONYMOUS 1874d).

The “Polk County Woman Suffrage Association” held its meeting on 14th February 1874. ELLEN’s daughter KATE TUPPER was one of the speakers chosen to address the meeting (ANONYMOUS 1874g). When the session was introduced by two male speakers who supported the equal suffrage movement, the audience soon made it clear that they “*had come to hear feminine oratory, not the kind that wears overcoats and pantaloons*” (ANONYMOUS 1874h, p.4). KATE TUPPER then lectured on the “*moral and religious aspects*” of the suffrage case, which she supported “*on the ground that the interests of good morals and religious progress demanded it*” (ibid.). She was followed by LIZZIE BOYNTON HARBERT¹²⁶ (1843–1925), then president of the society. The meeting itself was an important one for the suffragettes, because it was the follow-up to the State Convention, which had been held three years earlier (ibid.). A couple of weeks later, in March, it was planned that both the temperance cause and the woman suffrage question, now fully entangled in the discussions, should be introduced into State legislature. Therefore, the meeting in the courthouse was well attended, reportedly the room was “*literally full, almost uncomfortable so*”, whereby “*a large number of the members of the Legislature were present*” (ibid.).

By early March 1874 the suffragettes believed that both their causes on temperance and woman suffrage had good chances of passing the Iowa State legislature. ANNIE SAVERY, LIZZIE BOYNTON HARBERT were two of the speakers that were allowed to address the assembly directly. However, they seemed to have underestimated both the inter-party struggles for power as well as the unpopularity of the temperance idea among many members of the male population. The vote on the intemperance law went first and was lost by a narrow decision when the bill was taken up by the legislative for a House vote (ANONYMOUS 1874i–j). When a correspondent of “The Daily Democrat” reported from the State assembly he could quite juicily and spitefully report back that:

“They were jubilant over the idea that victory would perch upon their banners. The Hallelujah band of praying ladies, were out in full force to witness the death of King Alcohol and such a crew of vinegar faced, hatchet headed, cream curdling Xantippes and virtuous viragos were never before seen out side of a howling dervishes camp meeting. When it came to calling the roll you might have heard a pin fall and to see the jaws fall at the final result was as good as a pantomime, the

longitude of the facial frontispiece of the mare's baby was nothing to the elongation of the lantern jawed advocates of the second deluge" (ANONYMOUS 1874i, p. 4; see also Fig. 11).



King Alcohol and his Prime Minister.
 Alcohol & Death sit sum in the central part; the Social, the confirmed & moderate Drinker together with the Suicide & murderous fighter on the left. — Hope with her broken Anchor, mourns in sackcloth — On the right. — the dead & drunken; the beggard wife & children; the ruined cottage; the jail, the Drunkard's Graves &c.

Fig. 11: King Alcohol and his Prime Minister: Several Iowa newspapers in March 1874 covered the session in the House of Representatives for Iowa, in which suffragettes lobbied for Prohibition and Woman Suffrage. The articles were often graphic in their description and cross-referenced to metaphorical figures such as “King Alcohol” or the “corn crib skeleton”. The latter

one was even reported as a principal speaker in the session. Flyers, such as the one shown here (BARBER 1872), graphically visualize the context of the temperance dispute. While the metaphor of “King Alcohol” is self-explanatory, the figure of the “corn crib skeleton” is slightly more difficult to understand for modern readers. A letter from a woman in Brighton (UK), published in a temperance magazine from April 1874, clarifies that the term originated from the figure of speech “*that every house has its skeleton in the cupboard*” (see OGLE 1874, p. 164). The temperance women believed that this skeleton in most families was the drink (ibid.). The figure of the “corn crib skeleton” was simply a modification specific to Iowa, which seems to have been introduced in speeches of prominent politicians at that time. Source of Image: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA.

Abb. 11: König Alkohol und sein Premierminister: Verschiedene Zeitungen berichteten im März 1874 über die Sitzungen im Repräsentantenhaus von Iowa, wo Suffragetten für die Prohibition und das Frauenwahlrecht warben. Die dortige Berichterstattung war oft drastisch und plastisch und nahm Bezug auf metaphorische Figuren wie „König Alkohol“ oder das „Skelett im Maisspeicher“. Letzteres fand sogar Erwähnung als einer der Hauptredner der Veranstaltung. Historische Flugblätter, wie das hier dargestellte (BARBER 1872), visualisieren den Inhalt und Kontext der Mäßigungsdiskussion. Während die Metapher von „König Alkohol“ sich ist diesbezüglich selbst erklärt bedarf die Figur des „Skeletts im Maisspeicher“ einer kurzen Erläuterung. Der Brief einer Frau aus Brighton (UK), publiziert im April 184 in einem Temperenzmagazin, stellt klar, dass der Begriff sich aus der Redewendung ableitete, nach der „*jedes Haus ein Skelett im Wandschrank hat*“ (see OGLE 1874, p. 164). Die Frauen in den Mäßigungsvereinen waren der Meinung, dass dieses Skelett in den meisten Haushalten der Alkohol war (ibid.). Die Figur des „Skelett im Maisspeicher“ war in diesem Sinne eine Iowa-spezifische Abwandlung, die durch die Reden prominenter Politiker zu dieser Zeit eingeführt worden ist. Bildquelle: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA.

The disappointment in the suffrage movement was considerable, however it was still hoped that the suffrage vote would be more successful; a hope which though did not materialize. The deciding vote was lost, and some of the suffragettes, like MARTHA CALLANAN, blamed ANNIE SAVERY for the loss (NOUN & BOHLMANN 2002). The grudge was so great that when CALLANAN was later involved in editing the History of the Suffragettes the role of ANNIE SAVERY was completely left out (see NOUN & BOHLMANN 2002). At that time factions among the suffragette societies became more pronounced, yet it also provided new opportunities for ELLEN S. TUPPER and her daughters. March of 1874, however, was also the end of ANNIE SAVERY’s career for woman’s rights. A few weeks after the suffragette meeting a fire broke out destroying the SAVERY house which due to an administrative mistake was not insured. Much of what was not instantly lost by fire was plundered. The SAVERY house which had been described as the “Mecca of Desmoines” was ruined and would never return to its former glory. The SAVERYS had to relocate to their hotel and a few years later Des Moines, not, however, before ANNIE SAVERY would accomplish another milestone in the women’s suffrage movement, when she received a full law degree. Her topic again was women’s rights and after successfully completing her courses, being the second woman in Iowa to do so, she was admitted to the Iowa bar.

Meanwhile, as a side note of the suffrage meetings, ELLEN S. TUPPER became one of two ladies proposed to be a candidate for the position of School Directors (ANONYMOUS 1874k-l). Shortly afterwards, KATE TUPPER, ELLEN S. TUPPER’s daughter, was selected from among the 300 students of the Iowa Agricultural College to represent the institution as an orator in a state-wide Inter-Collegiate contest of 23 colleges. As a matter of interest for the suffrage movement this story again was covered intensely in the local newspapers, first under the headline “A Des Moines Girl

Successful" (ANONYMOUS 1874m–n). When the contest was held KATE TUPPER herself would give a talk on the suffrage cause, which she presented under the title "*The Gender of Intellect*" (ANONYMOUS 1874o–q). While she only made second place, it remained a story noteworthy to report for the equal suffrage cause (ANONYMOUS 1874r). Newspapers highlighted to the "*comfort of the girls of the State*" that there was not "*the least doubt in the world that Miss Kate ought to have been first*" and that "*board of Judges*" had been "*wholly masculine*" (ANONYMOUS 1874r, p. 1).

In an article in the *Woman's Journal* from 1874 COLONEL THOMAS WENTWORTH HIGGINSON¹²⁷ (1823–1911) highlighted the inconsistency that women such as ELLEN S. TUPPER were allowed to successfully establish and maintain a business, without having the same rights as men (ANONYMOUS 1874a–b). The article was also presented in several American newspapers even beyond the range of Iowa (see for example ANONYMOUS 1874c).

By May 1874 ELLEN S. TUPPER had been elected Vice-President of the "*Polk County Woman Suffrage Association*", while MARTHA CALLANAN had been elected Treasurer (ANONYMOUS 1874s). Furthermore, TUPPER started to preside over meetings of the local Women's Temperance League at that time (ANONYMOUS 1874t).

Iowa officials such as CYRUS C. CARPENTER (1829–1898)¹²⁸, supported ELLEN S. TUPPER as one of the 50 persons to be commissioned to the Vienna Industrial exhibition of 1874, arguing that she was one of the "*best representatives of intelligent, industrious, and practical American women*" (CALKIN 1978, p. 32). In a letter to president ULYSSES GRANT they argued thereby that "*Any duties which might devolve upon her, by virtue of her position, would be performed with intelligence, alacrity, dignity, and to the credit of our Country and the American character*" (CALKIN 1978, p. 32 & 38).¹²⁹ Although women had already been part of American delegations to Europe before, they had never held any official positions in this context. Nevertheless, the ambitious move by TUPPER might have been a direct response to a similar attempt by ANNIE SAVERY, who had officially tried to convince President GRANT to appoint her to the position of a United States consul to Le Havre, France (see Appendix 3). Her application, supported by twelve or fifteen senators and the vice-president elect HENRY WILSON (1812–1875), was made public in several newspapers at the time and caused a considerable storm of criticism from ANNIE SAVERY's opponents, such as LIZZIE B. READ¹³⁰ (ANONYMOUS 1873j–k; CALKIN 1978, p. 46). Even though ULYSSES GRANT had encouraged the appointment of women to government positions, both applications were eventually unsuccessful.¹³¹

Small anecdotes from the time illustrate how suffragettes such as ELLEN S. TUPPER and ANNIE SAVERY used any opportunity, however small, to draw attention to their cause. For example in the republican newspaper "*The Inter-Ocean*" from March 1874 a short sketch described an incident at the local election in Des Moines: "*When Mr. Allen Tupper, husband of the noted apiarian, Mrs. E. S. TUPPER, came to the polls in Des Moines to vote at the city election – his name did not appear on the rolls, but that of his wife did, so he sent her. She offered to vote which was declined on the grounds that the list was incorrect*" (ANONYMOUS 1874e, p. 7).¹³² This short sketch marks a turning point with her also becoming more active in the early Women's Suffrage movement. When the First Women's Congress was held by the "Association for the Advancement of Women" in 1873 in the Union League Theatre in New York, ELLEN S. TUPPER became one of the vice-presidents of the society to serve under the society's president MARY A. LIVERMORE (1820–1905).¹³³ She was joined by her daughter ELIZA TUPPER WILKES, who became the vice-president for Colorado. One of the major outcomes of the meeting was the establishment of the "Ladies' Social Science Association", which was then viewed as the suffragettes' latest experiment. During the following years the club would play a major role in recruiting women into universities, academic positions and scientific societies. While the role of

Iowa women on both Woman Congresses remains unclear, it links them directly to one of the historically defining moments in the movement to establish women in science and to several most prominent female scientists at that time. For example, during the Congress in 1874, MARIA MITCHELL (1818–1889), the most successful woman in American Science at the time was elected president of the society.¹³⁴

Some of the early suffragettes inspired by ELLEN S. TUPPER and ANNIE N. SAVERY and other female role models in agriculture went even further, demanding to rethink and reform agricultural education and the Agricultural Colleges in general. For example, in August 1872 a rather lengthy article titled "*Girls at the Agricultural College*" was published in "The Kansas Spirit" under the pseudonym FANNIE and featured women farmers and particularly ELLEN S. TUPPER and ANNIE SAVERY as "*the bee women of Iowa*", who had set examples by showing that the field of bee-keeping was one "*in which women can excel*" (FANNIE 1872, p. 8). However, this article also went on to highlight that at the time there was "*no avenue in the college for the development of mechanical talent among the girls*" (ibid.). Typesetting and telegraphy were given as explicit examples of fields which girls could excel in and which the Agricultural Colleges should rethink their curriculum (ibid.). The article concluded rather empathically: "*So with the girls. Whatever their chosen pursuit may be, let that be the thing in which they are most interested, and if they talk more upon that subject than you care to hear, why, remember that, unless you are a 'poor excuse of a man,' you, too, talk most of your work, because it is uppermost in your mind*" (ibid.).

12. The National Bee Journal and first troubles

In February 1873 ELLEN S. TUPPER seems to have been considering for the first time to become a proprietor of a magazine herself. The focus thereby seems to have been at first on a magazine with the working title "Twice a Week" to be "*made, sold and read by Iowa women*" (ANONYMOUS 1873n). Sometime in 1873 ELLEN S. TUPPER eventually purchased the "National Bee Journal", and by November it was published under her name as the chief editor for the first time (see Fig. 12) and the printing location was changed from Indianapolis to ELLEN S. TUPPER's home-city Des Moines. TUPPER soon started to use the journal even more extensively for self-promotion both of herself, but also for the journal and the "Iowa Italian Bee Company".

According to those reviews 2,600 copies of the journal were sold and delivered every year, the annual subscription of which was 2 dollars. At that time Ellen S. TUPPER was clearly trying hard to increase the circulation of the journal by granting incentives to subscribers for recruiting new readers. For instance, every existing subscriber was asked to "*try to obtain at least one subscriber*" (ANONYMOUS 1874f, p. 19).

Old subscribers doing so could receive their annual issues for half the price, and subscribers recruiting and paying for at least three new subscribers could "*receive their own journal for 1874 for free*" together with three copies of bee books (ibid.). With those "*liberal offers*", TUPPER hoped to persuade "*old subscribers to work for*" the journal (ibid.). Subscribers were asked to send money and subscription letters directly to ELLEN S. TUPPER. The transition of the journal, however, does not seem to have worked out smoothly. Subscriber lists seem to have been incomplete, some subscribers complained that they had not received journal issues and ELLEN S. TUPPER herself published a defence claiming that several subscribers had simply not provided their postal address (ibid.). Ironically only very few articles in the "National Bee Journal" can be directly related to ELLEN S. TUPPER (i.e. TUPPER 1873o).

The January 1874 edition includes, for example, several reviews from other newspapers and magazines covering the content of the new journal. In those reviews ELLEN S. TUPPER was

praised as a specialist, who had “*acquired almost a world-wide reputation by her writings and original investigations in the field of apiarian science*” and it was reported that TUPPER possessed an “*extraordinary business capacity, independence, and judgement*” and that “*whatever she attempts is very sure to succeed*”.¹³⁵



Mrs. ELLEN S. TUPPER, Editor.

CORRESPONDING EDITORS:

L. C. WAITE, St. Louis, Missouri.

A. J. POPE, Indianapolis, Indiana.

Mrs THOMAS ATKINSON, Leesburg, Florida.

FEB.

DES MOINES, IOWA.

1874.

Fig. 12: Editorial Department of “The National Bee Journal” with ELLEN S. TUPPER as editor.

Abb. 12: Redaktion des “National Bee Journal” mit ELLEN S. TUPPER als Herausgeberin.

The split in the suffragette movement seems to have started to cause problems for ELLEN S. TUPPER. THOMAS G. ORWIG¹³⁶ (born 1834), one of the editors of the Des Moines Register, which ANNIE SAVERY had also worked for as a correspondent in 1873 for some time (NOUN & BOHLMANN 2002), apparently started to investigate about problems concerning deliveries of Italian bees. Apparently ORWIG suspected that TUPPER was “*delivering wagon loads of empty bee hives and invoicing them as live colonies*” and had thus begun to make enquiries (ORWIG 1874a, p 4). When ELLEN S. TUPPER heard of this, she vigorously replied to the accusations and publicly accused ORWIG of slander in her bee journal.¹³⁷ When ORWIG heard of this he himself made his allegations public and highlighted that he had not been the originator of the story, but that he had an informant, whose name he had already given to TUPPER in February 1873 (ORWIG 1874a). He also wrote that there were other “*respectable names*” that he could bring forward (ORWIG 1874a, p. 4). However, the only informant he publicly named, a Mr. DORR, categorically denied having made such allegations and repeated that he had only told ORWIG about ELLEN S. TUPPER’s article (DORR 1874).¹³⁸ ORWIG, nonetheless, insisted on his report, doubling down that “*reliable and responsible parties*” had provided him with the information and that he believed that he could “*give a truthful history of the famous three hundred colonies of bees from their triumphal entry to Des Moines until their final ending in smoke!*” (ORWIG 1874b, p. 4). The story was never brought up again, yet in 1874 ELLEN S. TUPPER’s “National Bee Journal” was purchased and consolidated with the “American Bee Journal”, of which she remained an editor (see also ALLEY 1889, p. 134; DADANT & GROUT 2010).

13. ELLEN S. TUPPER’s career as an alleged forger

In the winter of 1875/76 ELLEN S. TUPPER’s business venture finally collapsed. First indications of this were her largely exaggerated claims appearing in several newspapers. In those she reported that she would produce about 20,000 pounds of honey in the next year. In November the Agricultural College ordered, without further explanation, that the services of Mrs. Tupper as Bee Lecturer at the College should be discontinued (ANONYMOUS 1875b).¹³⁹

In December 1875 forgeries of notes, sold to a bank and amounting to a sum of 1,000 \$, were discovered in Marshalltown (ANONYMOUS 1876a, p.3). They were issued in the name of several “*prominent and wealthy men*” from Iowa. Most conspicuously one of those notes was reported to have been issued in the name of JAMES HARLAN (1820–1899), a former Iowa Senator and close friend of ABRAHAM LINCOLN, who had served as US Secretary of the Interior after LINCOLN’s assassination. Allegedly those notes were soon traced back to ELLEN S. TUPPER, but at that time no allegations became public. Particularly the “Register”, the most important newspaper in Des Moines, was later reported to have refrained from any mention, as it was hoped “*that the matter could be arranged and a good name be kept untarnished*” (ANONYMOUS 1876a, p. 3). However, letters of a correspondent from Marshalltown were presented to JAMES HARLAN in the Savery House, who reportedly declared that he did not know anything about the matter. “The Register” at that time allegedly informed ELLEN S. TUPPER on the discovered forgeries, to which she confessed, promising prompt reparation. Because the banks were paid 450\$ in the course of a few days and the total amount soon afterwards, no criminal proceedings seem to have commenced (ANONYMOUS 1876a, p.3) .

Nonetheless the issue would soon escalate further. In early January 1876 ELLEN S. TUPPER stopped in Monticello for a night on her way to Delaware County. The following morning, she visited the Monticello Bank, negotiating notes amounting to \$800. Four or five days later she returned, and successfully negotiated the exchange of further notes with the bank. A few days after she had left, the notes “*sold upward of \$2000 worth*” were discovered to be forgeries (ANONYMOUS 1876c). Authorities “*telegraphed far and near*” to ascertain the whereabouts of ELLEN S. TUPPER (ANONYMOUS 1876r, p. 4).

When ELLEN S. TUPPER reached State Centre (Iowa) a few days later to visit her husband, who was working there as a teacher, the local authorities took her into custody and SHERIFF BABCOCK from Monticello and CYRUS LANGWORTHY, the Monticello bank’s cashier went to State Centre to state their case (ANONYMOUS 1876b). Because of her arrest, ELLEN S. TUPPER had a nervous breakdown, suffering from violent spasms and some of the earlier newspaper reports described that she fell ill with a disease of the heart (ANONYMOUS 1876b–c). While the Monticello Sheriff had “*strong suspicions of the genuineness of the woman’s spasms*”, MR. DIXON, her family physician was telegraphed (ANONYMOUS 1876b, p. 1). Therefore, as a courtesy, she was allowed to spend her time guarded in the local hotel (ANONYMOUS 1876c).

Due to her illness and protests by her doctor and family it seems that TUPPER then remained in Monticello for some time, where she stayed at the residence of MAYOR FARWELL¹⁴⁰, whom the court had authorized “*to take charge of and care of her during her illness*” (ANONYMOUS 1876g, p. 1). Meanwhile her family on the East Coast was contacted in the hope of obtaining money for her support and providing bail. Gossips started to spread that ELLEN S. TUPPER had become insane. One of the most widely reported rumours at the time was that while she was imprisoned in State Centre, she had given her daughter KATE TUPPER a rather ominous letter, which read (ANONYMOUS 1876g, p. 1):

“Enclosed you will find two notes. The circumstances under which I obtained them I must keep secret even from you. I promise not to use them unless driven to it by dire necessity, and I desire you also not to use them unless absolutely necessity to save your mother’s good name.” Allegedly, attached to this letter were the two notes from the December 1st, 1875, of which the larger one was reported by several major newspapers as follows (ANONYMOUS 1876g, p. 1):

“Thirty days after date I promise to pay Mrs. Ellen S. Tupper or bearer the sum of One Thousand Dollars, with interest at ten per cent. Per annum.

*His
Jesus X Christ
mark*

The second note worth \$500 was said to have been signed accordingly. Such reports seem to have originated from the "Marshall (Iowa) Times", which was reported to have believed "*Mrs. Tupper to be insane, a monomaniac, morally irresponsible for her acts*" all along (ANONYMOUS 1876s, p. 4).

The "*sad case*" was so prominent that it was widely reported by the newspapers, not only in the Midwest, but also in reports on the East and West Coast (ANONYMOUS 1876e, p. 12). Because of these revelations in early 1876 the case also became a problem for the suffragette movement. Apparently, ELLEN S. TUPPER was cited by some people as an argument against the suffragette cause. This soon led to attempts to distance ELLEN S. TUPPER from the movement. For example, some newspapers highlighted, that NETTIE SANFORD (1830–1901)¹⁴¹, the then "*editor of the woman suffrage journal of Iowa*" had affirmed distinctly that "*Mrs. Tupper never was a suffragist*" (ANONYMOUS 1876h, p.1). However, such distancing by the suffragettes seems to have been a clear exception.

14. A Woman Hunt

The further story is complicated by many contradicting reports. At the time more and more forgeries emerged. It was reported that she had forged the names of PLATT SMITH and the former city mayor JOHN HODGDON (1800–1883)¹⁴², two notable citizens from Dubuque. C.C. CARPENTER, the former governor of Iowa, and THOMAS NEWMAN, editor of the American bee journal, were also among her alleged victims (NEWMAN 1875b). Overall the sum of damages increased to between 11,000 and 20,000 dollars. The general scheme of her activity was to substitute old notes, when they became due with new ones. Some of the banks thought that it was impossible to retrieve any money from Mrs. TUPPER whereas others might have believed in the insanity defence.

Despite all this Ellen S. Tupper was released sometime in February 1876. The exact circumstances are unclear. According to some rumours, circulated by newspapers at that time, she left Davenport hiding in the bottom of a plain wagon (ANONYMOUS 1876o). Some other reporters supposed that she had been brought to an insane asylum (ANONYMOUS 1876p), but this was not the case. It seems that she first returned to Des Moines, probably to sell her farm in Brighton.¹⁴³ In May 1876 ELLEN S. TUPPER and her daughter eventually tried to leave Iowa to reach her daughter ELIZA's home in Canton¹⁴⁴, in the Dakota Territory. Annoyed by reporters, who interfered with their journey, ELLEN S. TUPPER told them off and referred them to the newspapers that "*knew more about her movements and condition than she did*" (ANONYMOUS 1876k, p. 4).

In June she had to appear for arraignment but failing to do so an issued bond was forfeited (ANONYMOUS 1876l). Thus, by mid-1876 ELLEN S. TUPPER was under bonds to answer two indictments in Davenport (ANONYMOUS 1876i): One indictment was arranged on the grounds of "*forgery*" and one for "*uttering false notes as true ones*" (ANONYMOUS 1876i, p. 2). It took the authorities some time to find out where she was living at that time. In August 1876 SHERIFF LEONARD from Scott County ascertained the whereabouts of ELLEN S. TUPPER i.e. that she was living on a farm in Lincoln County in the Dakota Territory, shortly behind the Iowan border (ANONYMOUS 1876n). The sheriff obtained a requisition from Iowa's governor SAMUEL J. KIRKWOOD (1813–1894) and deputized LOUIS FEID from the police force to make the arrest

(ibid.). He also obtained documents from Dakota officials and with the support of SHERIFF SOUTH from Canton they rode to the TUPPER farm, where ELLEN S. TUPPER's husband had lived for some years and where they arrested her (ANONYMOUS 1876m, n). The officers were surprised by the comfortable home they found: a large farm "*a homestead of 160 acres with another 160 acres as a 'timber claim'*" (ANONYMOUS 1876n, p. 4). The police operation seems to have surprised the family, but according to newspaper reports ELLEN S. TUPPER expressed her ready desire to accompany the sheriff and at once packed her trunk and bade her family good-bye (ANONYMOUS 1876m). On the trip back to Davenport she was unconcerned and reiterated her faith that a trial would prove her innocence (ANONYMOUS 1876m, n). The arrest report printed in the local newspapers gives a small account of the trip back to Davenport: "*On the way she was cheerful, and talked with officer Feid as freely and good naturedly as though he were an old acquaintance whom she had met by chance on a pleasure trip. At nearly every station along the C. R. I. & P. she met acquaintances, and greeted them in a cheery, careless, way that was pleasant but surprising to the officer. She remarked to several acquaintances that she was going on business*" (ANONYMOUS 1876n, p. 4).

In September 1876 the "Davenport Democrat" was able to report somewhat sarcastically, that ELLEN S. TUPPER, "*known throughout Iowa and the West as the 'Bee Queen'*" had been assigned "*very comfortable quarters in our county jail*" and that she was treated with "*every consideration consistent with duty by our Sheriff and his family*" (ANONYMOUS 1876j, p. 1).

TUPPER and her lawyer SUTTON pleaded "*not guilty to both indictments*" (ANONYMOUS 1876i, p. 2). Both "*cases were continued on application to take testimony of the defendant*" and ELLEN S. TUPPER was released from custody once more, after MR. SUTTON presented two bonds for \$300 and \$500 (ibid.). The signatures on those bonds then reported highlight vividly that TUPPER still had strong support. Two prominent signees on those bonds were JAMES CALLANAN (1820–1904)¹⁴⁵, the husband of the leading Iowa suffragette MARTHA CALLANAN, and ex-governor SAMUEL MERRILL (1822–1899) (ANONYMOUS 1876i).¹⁴⁶

15. The trial of ELLEN S. TUPPER

The trial of ELLEN S. TUPPER eventually commenced at the end of February 1877 in the District Court room under the presiding substitute judge HUGH M. MARTIN¹⁴⁷. With a nearly "hopeless case" it appears that at the beginning it was difficult to find a lawyer to defend ELLEN S. TUPPER. Yet her daughter managed to organize a team that consisted of a local lawyer and the young PRESTON M. SUTTON (1845-1901), who would later raise to prominence as a State senator and criminal defence lawyer. He became renowned to take over several hopeless and impossible cases which had been refused by other member of the Iowa bar (ANONYMOUS 1901).

The defence was meticulously prepared, based on the notion that ELLEN S. TUPPER was insane and thus not responsible for her doings. As a matter of fact, for more than a year article after article in the mid-west newspapers had described TUPPER as an insane person in more or less detail. It was highlighted that insanity was common in TUPPER's family and TUPPER's brother REV. JAMES WHEATON SMITH was called as a witness who could attest "*upon oath*" to a history of mental problems that had troubled ELLEN S. TUPPER in the past: "*I suggest what I believe to be the fact, aberration of the mind. Her birth was premature. In girlhood she was a sleep-walker. In later years, while living in Newton, she wandered off into the woods in an unsettled and confused state of mind in the day-time, and was brought home thoroughly chilled and beside herself. The constant strain of mind in the work to support her family, has been enough to set a dozen women crazy [...]*" (ANONYMOUS 1876f, p. 2). The "Chicago Tribune" reported in a similar fashion that her family physician had declared that "*she was decidedly a monomaniac on money affairs*" and "*not of sound mind*" (ANONYMOUS 1876d, p. 3). The trial itself was a momentous one for the time.

Proceedings nearly took a whole week. The courtroom was well attended not only by members of the TUPPER family but also many interested and supportive suffragettes. One of the reasons for the length of the trial was that 25 witnesses for the defence were called, even though some only in absence with written statements presented by the defence team. The final day of the trial was a Saturday, which was rather unusual but very likely selected due to the great interest. Parts of the address to the jury, held by her counsellor and friend SUTTON, have survived in form of an abstract that was printed in 1877 in the "Bee-Keepers Magazine" (ANONYMOUS 1877b, p. 80). In it SUTTON again argued that TUPPER had "*fallen subject to inherent insanity that had shown itself in her grandfather and her aunt, and that has more recently appeared in the insanity of her unfortunate nephew*" (ibid.). He also emphasised that while the victims "*should have their money*", ELLEN S. TUPPER was "*penniless*" and "*without a decent place to lay her head*" (ibid.).

At six o'clock that day the prosecuting attorney gave his final statement and the judge instructed the jury on the elementary questions of the meaning of "*reasonable doubt*" and in regard to the question of insanity, highlighted that "*the law of this State shields or excuses every person from punishment for wrongful and criminal acts when done in a state of insanity*" (see Appendix 4).

The jury of twelve eventually retreated in the evening to discuss what judgment they should pass. It was anticipated that the jurors would reach a verdict by midnight and arrangements had been made to open the court at that hour. However, it soon turned out that the jury was hung (ANONYMOUS 1877c). In a first test vote eight of the jurors voted for conviction and four for acquittal (ANONYMOUS 1877c, 1888b). When midnight came it was found that the jury was deadlocked (ibid.). And after a further lengthy and free discussion the recorded vote before retirement was five for conviction and seven for acquittal (ibid.). In the morning another juror had changed sides, but there was still not final agreement (ibid.). The jurors went to breakfast, continued discussing the case and two more votes were held, with the results that more jurors switched in favour of acquittal (ANONYMOUS 1877c). Eventually the last juror in favour of conviction yielded to the majority in the late morning (ibid.). The sheriff was informed that the jury had reached a verdict, judges and counsellors were notified and the news rapidly spread in the city (ibid.). When the court opened, for the first time on a Sunday morning, a large crowd including ELLEN TUPPER's husband and two of her daughters had gathered in the court room (ibid.). Eventually the jury handed a paper to the Clerk of court, which read "*We the jury find the defendant not guilty*" (ANONYMOUS 1877c, p. 1.). The local Davenport newspapers reported that when ELLEN S. TUPPER heard the final verdict she smiled while looking at her husband, before both her second attorney FOSTER and the jury came forward to congratulate her. Eventually the court ordered ELLEN S. TUPPER and her bail to be released, the jury was discharged, and the court adjourned. Not surprisingly the verdict was received by the public with considerably varied responses (ANONYMOUS 1877c). While the newspapers from 1877 do not give any indications on the jury's reasoning, a later recollection of the trial, which was published anonymously in 1888 gave further details (ANONYMOUS 1888b).¹⁴⁸ Apparently, it had been ELLEN S. TUPPER's daughter KATE who had made all the difference. During the trial, both on the stand and when attending to her mother, "*her eyes would frequently fill with tears – and so would the eyes of some of the jury in sympathy*". The anonymous witness of the trial concluded rather disappointedly that her "*daughter's artless distress blinded the eyes of the jury – what with the tears of their own, the majority couldn't see the state's side of the case very well*" (ANONYMOUS 1888b, p. 1).

With the trial over the case was still not fully concluded. A further trial with further charges was looming. However, in May 1877 the District Court of Davenport dismissed the case in consent with the district attorney LYMAN A. ELLIS, who remarked, that "*to try the last case had already cost the county \$1,000*" and that he "*didn't propose to experiment any further*" (ANONYMOUS 1877d, p. 1).

16. Final years and legacy

After the trial ELLEN S. TUPPER's work as a beekeeper and in American bee literature mostly came to an end. The "American Bee Journal" notified her that her editorial services were no longer required (NEWMAN 1875b) and on the 26th of February 1876 all connections to ELLEN S. TUPPER and "*The Italian Bee Co.*" were terminated by the "American Bee Journal" (Anonymous 1876). On the same day her ties to the "*Italian Bee Company*" were dissolved, too, and from then onwards the company was managed by a J.E. ROCKWOOD, who advertised to sell the remaining colonies, queens, Nuclei, extractors and hives.¹⁴⁹ Little is known of her later life. She moved to Dakota to live with her husband ALLEN and her grandchildren on the farm of her daughter ELIZA. The two younger TUPPER children had joined them there, and after the death of ALLEN TUPPER in 1879 they found their own ways of coping with what had happened in Des Moines. Probably inspired by their sister KATE, who was teaching in a nearby school and particularly interested in theatrical acting, they staged their own amateur court room drama, featuring a "*Saloon keeper who had brought ruin to the family through his calling, the wife being the complainant*" whereby they took over the roles of an attorney and the judge to rule based on the "*Iowa law for damages to be recovered*" (ANONYMOUS 1878b, p. 1). Eventually ELLEN S. TUPPER's youngest son tried to take over the farm, while she and her daughter KATE relocated to Oregon, where ELLEN S. TUPPER spent the next two or three years of her life (ANONYMOUS 1888c).

However, apparently ELLEN S. TUPPER had stayed in contact with a few of her former friends and in the late 1870s and 1880s she continued to write on her favourite topic compiling a series of articles on bee-keeping for beginners which were published in "The Bee-Keepers Magazine" (TUPPER 1877, 1878a-n, 1879a-c, 1882a-b 1883a-k, 1884). The contents of her articles was primarily about instructions for beginners in beekeeping. It is remarkable that in the 1880 she also tried to establish herself in the real estate business by writing about obtaining land in Dakota (TUPPER 1882a, 1883c), which led to a flood of correspondence and a careful remark of the editor to consider ELLEN S. TUPPER fragile mental health.

Probably during those years, she also wrote for the "Youth's Companion", a magazine that was linked to MARY LIVERMORE, whom ELLEN S. TUPPER knew from her suffragette days, and her son in law CROMWELL GALPIN, who for some time worked as an editor for the magazine. She was said to be a regular correspondent for this magazine, yet individual articles from this work remain unknown (ANONYMOUS 1888c).

In 1882, when she discovered an article written by REBECCA HARDING DAVIS (1831-1910) on "Bee-Keeping for Women" that had been published in the "Youth's Companion" she could not resist but organize a reprint pimped with her own comments in "The Bee-Keepers' Magazine" on her favourite topic (DAVIS 1882; TUPPER 1883a). The article would be a swansong for her promotion of women to become beekeepers. In this commented edition ELLEN S. TUPPER tried to highlight again the advantages of both beekeeping and poultry-raising, a profession taken up by one of her daughters, "*as an employment for women*" (TUPPER 1883a, p. 9-11). She emphasized strongly that the profession can be pursued at home, both on a farm and in the city without the need for much space, that "*it was not necessary in the case of bees to raise anything for their support*" and she underlined that "*any woman or girl cannot only make honey boxes, but the hives themselves*" (ibid.). She wrote that according to her life-long experiences it required only little time to take care of the bees, which made it an ideal profession for mothers and teachers, an argument which she underlined by stating that she had done her "*most successful work with bees [...] with an infant in arms, or in a baby carriage*" (TUPPER 1883a, p. 9-11). The most amusing part of her reflection was a short paragraph in which she highlighted that bee-keeping required only a small amount of "*capital to commence with*", not sparing the suggestion that this could be earned by working for the magazine" (TUPPER 1883a, p. 9-11). "*We know a girl of only 12 years old*", she wrote, "*who, in a neighbourhood where not one stand of bees was kept, obtained fourteen subscribers in a week, some of them who wanted to know about the business, but others no doubt*

who liked the energy of the child, and wanted to see her try bee-keeping. She did try it, and most successfully, as the readers of the MAGAZINE would admit if I should give her name" (TUPPER 1883a, p. 9–11).

In 1884 ELLEN S. TUPPER travelled through California and wrote to her friend A. J. KING, then one of the editors of "The Bee-Keepers' Magazine", reporting on a bee farm she had visited there (TUPPER 1884). It was probably the last article she ever wrote on her lifelong passion.

In the summer of 1887 on the invitation of the manager of the Pacific Line steamer "Aneon" she undertook a trip to Alaska, where she stayed for some time and wrote about her journey but reports of this trip seem to have been lost (ANONYMOUS 1887a, 1888a).

It is possible that after her trial she had continued to write under various pseudonyms. For example, it is known that in her final years she published a couple of stories for young readers in the "Pacific Rural Press" under the pen name "PIONEER" (1886, 1887). It was a fitting choice given that during her life she had travelled through the whole width of the United States from its furthest past in the east, the New England coast of Maine, where she spent her childhood, to the far west in Alaska.

After her return, she visited her daughter MADGE TRUE in El Paso, Texas, where she suddenly suffered a heart attack and died (ANONYMOUS 1888a). At the time of her death her obituaries noted her as "*one of the foremost entomologists of the world*" and a "*leading authority on bee culture*" (ANONYMOUS 1888c, p. 3). The local citizens of Brighton who knew her remembered her "*with kindly and charitable feelings*" to have been "*a woman full of kindness, charity, ambition, devoted to her friends and her bees, and withal a woman of rare intelligence*" (ANONYMOUS 1888d).

Due to the controversies that surrounded the end of her beekeeping career she was almost forgotten. After her death her story as a beekeeper only appeared as short stubs in biographical collections written by some of the leading suffragettes that she had known during her operations in Iowa. However, other biographical recollections from the late 19th and early 20th century highlight that she had inspired a lot of women beekeepers in her time. For example when MARY MAGOUN RAYMOND (1858–1895) presented a paper on the successful history of women in journalism in 1888, ELLEN S. TUPPER was mentioned as one of the female pioneers that had held an editorial position (RAYMOND 1888). Many other older beekeepers at the turn of the century also remembered ELLEN S. TUPPER, some fondly recalling that they had received their first Italian queens from her.

Her daughters stayed true to the suffragette and intemperance movement after her death. They were particularly active in promoting women and early childhood education. In that capacity they became regular lecturers at many of the larger Women Congresses. Their personal highlight was probably the Woman's Congress of 1894 in San Francisco, where all four of the TUPPER daughters, as well as NORA SMITH¹⁵⁰, one of ELLEN S. TUPPER's nieces, held lectures (ANONYMOUS 1894).

Even beyond the Atlantic, in Germany, ELLEN S. TUPPER was not completely forgotten. In 1887 for example FRANZISKA GRAVENHORST, the daughter of CHRISTOPH JOHANN HEINRICH GRAVENHORST (1823–1898), a well-known German apiarist, revived the question of women in apiology and recalled that her father had had a relatively intensive correspondence with the American beekeeper ELLEN S. TUPPER, her image being part of his extensive beekeeper album (GRAVENHORST 1887a). In the tradition of previous interactions, FRANZISKA GRAVENHORST gave a free translation of an article by an American lady beekeeper that she had recently read (GRAVENHORST 1887a). FRANZISKA GRAVENHORST's published letter did not remain unanswered. In the next issue, a letter from the Danish bee-keeper BARBECK complimented Mrs. GRAVENHORST

for “*writing quite nicely*” and highlighted that in Denmark women are often able beekeepers in standing long ahead.¹⁵¹ The letter was commented by a short editorial reply, which highlighted that it had raised great interest that the Danish ladies were such capable beekeepers and such was also known from several examples in Germany, where ladies were “*beekeeping with the best success*”.¹⁵² The editorial reply ended with the quite laconically phrased question “*Why shouldn't that be the case?*”.

Materials and Methods

A work like the present biography would not be possible without the multiverse of existing digital literature databases. The following are the most important search engines that have been used intensively by us:

“Google Books”; “Google Scholar”; “ResearchGate”; “HathiTrust”; the “Internet Archive”; www.newspapers.com; “Chronicling America”, the “Historic American Newspapers” project maintained by the “Library of Congress”; the now largely defunct historical newspaper collection in the “Google News Archive”; the various local and regional versions “Community History Archive”, which provides access to many historical newspapers from Iowa and particular South Eastern Iowa; the “California Digital Newspaper Collection”; the “Digital Maine Repository” and the “Maine Newspaper Project” by the “Digital Public Library of America”; the “Iowa Digital Library” by the “The University of Iowa Libraries”; the special “Apidology Collection” maintained by the “ZB MED – Informationszentrum Lebenswissenschaften” in Bonn; ANNO – AustriaN Newspapers Online; the “Digital Collections” of the “Carnegie Mellon University” libraries; the “Biodiversity Heritage Library”; the “JSTOR Collections”; “Web of Science”; “Science Direct” and “PubMed”; The Hoosier State Chronicles (Indiana’s Digital Historic Newspaper Program); American Antiquarian Society Historical Periodicals Collection; etc.

Whenever possible, dates of birth and death and individual short biographies were included for all persons that are mentioned in the present article, and who had direct or indirect links to ELLEN S. TUPPER. In cases where those are missing, such as for example SHILOMETH S. WHIPPLE or FRANZISKA GRAVENHORST, the reader must assume that biographical data was not available to us at all. Biographies for U.S. presidents such as ABRAHAM LINCOLN, were excluded intentionally due to limitations in space. Selected short biographies, not surprisingly, vary in scope, length and content and are subjective selections by us. This is partly because in many cases only limited information was available, whereas in others the scope was restricted to aspects most closely linked to the life of ELLEN S. TUPPER or the suffragette movement. Eventually some of the endnotes are more extensive in those cases, where we were able to establish new facts on selected side-topics, and which we found interesting.

A short notice of the used citation style slightly varying from the well-established standards of “Entomology heute” must be announced:

First, there was no established rule on how to cite historical newspapers. Thus, to allow readers to find those articles, daily and weekly newspapers were consistently cited by giving both the location and date of print. Additionally, some newspapers, much like journals, used volume and issue numbers. Those are also given for most cited articles in the literature list, however they were not available in all cases and they also don’t necessarily help to locate articles in digital newspaper databases. Readers should also be aware, that sometimes only volume numbers but not an issue number are given in the literature list. This is due to the absence in the original publications. Identification by volume and page number thus unfortunately is not always possible, as the joined information of volumes and page number itself are not unique. In those

cases, it is only possible by additionally considering the given date of print. Similarly, many of the local newspapers of the 19th century did not use a continuous page numbering. Often, if given at all, page numbers on those newspapers started renewed in every daily or weekly edition. Page numbers are thus only of limited help in many cases, too, but they can help to locate an article when a specific issue has been already located.

Acknowledgments

We want to thank MONIKA POULTER (Mönchengladbach, Germany), HARTMUT GREVEN (University Düsseldorf) and MARGARET GLENDINING (Rothamsted Research, UK) for their careful corrections and comments. We are grateful for the support of CATHERINE FEARNHEAD (Rothamsted Research Library) and CHRISTY HENRIKSON (WTS, Memorial Library, University Wisconsin Madison) to obtain the portrait of ELLEN S. TUPPER.

Literature

ADAIR, D.L. (1872): Announcement of Adair's Annals of Bee Culture; An Apicultural Magazine 4: 1-2.

ALLEY, H. (1889): The National Beekeepers Directory. Salem Press Publishing and Printing Co., Salem, Mass..

ALSBERG H.G. & WOODWARD, E.S. [eds.] (1938): U.S. One. Maine to Florida. Compiled and written by the Federal Writers' Project of the Works Progress Administration. American Guide Series. Modern Age Books, Inc., New York.

ANDREAS, A.T. (1875): A. T. Andreas' illustrated historical atlas of the State of Iowa. [Chicago, Andreas Atlas Co, 1875] Map. <https://www.loc.gov/item/70654676/>.

ANDREWS, L.F. (1910): Pioneer Women in Bee Industry. The Register and Leader (Des Moines, Iowa) (9th January 1910) 60(192): 30.

ANONYMOUS (1772): CXXV. Abhandlungen und Beobachtungen durch die öconomische Gesellschaft zu Bern gesammelt, des zehnten Jahrganges 1769 erstes und zweites Stück. pp. 598-621 in: Auserlesene Bibliothek der neuesten deutschen Litteratur, Erster Band, Meyerschen Buchhandlung, Lemgo.

ANONYMOUS (1815): Singularity. United States Gazette (Philadelphia, Pennsylvania) (26th August 1815) 15(No. 1486): 1.

ANONYMOUS (1819): American Museum. Live Alligators. The New-York Evening Post (New York, New York) (1st July 1819) 5317: 2. [Advertisement]

ANONYMOUS (1831): Pawtuxet Fair. The New England Farmer (12th October 1831) 10(13): 98-99.

ANONYMOUS (1837): A. 1. Abstract of the condition of the banks in Maine. Near January 1, 1837. Appendix to Doc. No. 79: Condition of State Banks. Letter from the Secretary of the Treasury, Transmitting the information required by a resolution of the House of Representatives of the 10th July, 1832, in relation to the Condition of the state Banks, &c., January 8, 1838. 25th Congress, 2nd Session, House of Representatives Treasury Department.

ANONYMOUS (1838a): Mrs. Tupper. [Advertisement] Bangor Daily Whig & Courier (Bangor, Maine) (7th May 1838) 4(263): 2.

ANONYMOUS (1838b): A Distinguished Stranger. Public Ledger (Philadelphia, Pennsylvania) (1st

December 1838) 6(57): 4

ANONYMOUS (1838c): A New York Stranger. *New England Farmer, and Gardener's Journal* (12th December 1838) 17(23): 184.

ANONYMOUS (1838d): Our state Legislature. *Bangor Daily Whig and Courier* (Bangor, Maine) (10th January 1838), p. 2.

ANONYMOUS (1839a): Notice. [Advertisement] *Bangor Daily Whig & Courier* (Bangor, Maine) (24th April 1839) 4(263): 2.

ANONYMOUS (1839b): Highly Important from Maine. Prisoner Taken. *St. Johnsbury Caledonian* (St. Johnsbury, Vermont) (26th February 1839) 2(82): 2.

ANONYMOUS (1843a): "*Married, [...] In Calais, Mr Allen Tupper of Houlton, to Miss Ellen Sweetser Smith, of C.*". *Bangor Daily Whig & Courier* (18th December 1843) 10(144): 2.

ANONYMOUS (1843b): Natural History Society. *Bangor Daily Whig & Courier* (Bangor, Maine) (19th September 1843) 10(68): 2.

ANONYMOUS (1845): Eighth Annual Meeting of the Maine Temperance Union. Cold Water Fountain (Gardiner, Maine) (7th February 1845) 1(33): 2.

ANONYMOUS (1846): The adventures of Captain John Smith, the founder of the Colony of Virginia. D. Appleton & Co., New York.

ANONYMOUS (1848): Transactions of the American Art-Union for the year 1847. George F. Nesbit, Stationer & Printer, New York.

ANONYMOUS (1850a): Transactions of the American Art-Union for the year 1849. George F. Nesbit, Printer, New York.

ANONYMOUS (1850b): Beauties of the Sub-Treasury. *The Evansville Daily Journal* (Evansville, Indiana) (27th February 1850) 2(245): 2.

ANONYMOUS (1851): Table of Post Offices in the United States of the First Day of January, 1851, arranged in alphabetical order. W. & J. C. Greer, Washington.

ANONYMOUS (1852a): The Maine Register and State Reference Book 1852. Hallowell: Masters, Smith & Company.

ANONYMOUS (1852b): --. *The Glasgow Weekly Times* (Glasgow, Missouri) (30th September 1852) 13(31): 2.

ANONYMOUS (1852c): Naturalized German citizens, celebrating the 400th anniversary of the first brewing of Lagerbier, in Hopplepopple, on the Rhine, A.D. 1452. Dedicated to Neal Dow, and the friends of the Maine Law, and which, in their eyes, may become a new argument for Native Americanism. Illus. in: *Yankee Notions*, 1852 Aug., p. 243. Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA.
<https://www.loc.gov/pictures/item/2004679733/>

ANONYMOUS (1853a): Acts and Resolves passed by the Thirty-Second Legislature of the State of Maine. A.D. 1853. Chapter 110. An act to incorporate the Calais Gas Light Company, p. 96–97.

ANONYMOUS (1853b): Acts and Resolves passed by the Thirty-Second Legislature of the State of Maine. A.D. 1853. Chapter 217. An act to incorporate the Lewy's Island Railroad Company, p. 228–229.

ANONYMOUS (1853c): Rode's United States Post Office Directory and Postal Guide. Compiled from the Records of the Post-Office Department. Charles R. Rode, New York.

ANONYMOUS (1854a): Cholera. Muscatine Weekly Journal (Muscatine, Iowa) (5th August 1854): 1. [Reprinting the excerpt of a notice from the "Washington Argus" from the 27th July 1854].

ANONYMOUS [a.k.a. MARK TWAIN ?] (1854b): Democracy Getting Unpopular. Tri-Weekly Muscatine Journal (Muscatine, Iowa) (5th August 1854) 1(61): 2.

ANONYMOUS (1854c): Maine. Railroad Accident – Maine Whig State Convention &c.. New York Times (New York, New York) (3rd July 1854) 3 (No. 871): 2.

ANONYMOUS (1854d): The Whigs in the North. The Daily Union (Washington D.C.) (7th July 1854) 4(70): 2. [The article was signed with W. and probably written by ISRAEL WASHBURN].

ANONYMOUS (1854e): Free Soilers in Maine. Hartford Courant (Hartford, Connecticut) (8th September 1854) 18(212): 2.

ANONYMOUS (1854f): --. The Rock Island Weekly Argus (Rock Island, Illinois) (27th September 1854) 3(49): 1

ANONYMOUS (1854g): Iowa Items. Tri-Weekly Muscatine Journal (Muscatine, Iowa) (21st June 1854) 1(32): 2.

ANONYMOUS (1855a): The "Ladies' Maine Law Society". Muscatine Tri-Weekly Journal (Muscatine, Iowa) (2nd March 1855) 1(130): 2.

ANONYMOUS (1855b): Declaration of Principle. Muscatine Tri-Weekly Journal (Muscatine, Iowa) (2nd March 1855) 1(130): 2.

ANONYMOUS (1856a): Census. City of Providence, July 1, 1855.

ANONYMOUS (1856b): Hon. Hannibal Hamlin, Governor of Maine. Ballou's Pictorial 11(19): 300.

ANONYMOUS (1856c): Visit to Clay and Brighton. The Washington Press (Washington, Iowa) (9th July 1856) 1(12): 2.

ANONYMOUS (1860a): Republican Meeting at Brighton. Burlington Weekly Hawk-Eye (Burlington, Iowa) (11th August 1860): 2.

ANONYMOUS (1860b): Secession and Sorghum. The Daily Chicago Tribune (Chicago, Illinois) (29th December 1860) 14(154): 2.

ANONYMOUS (1860c): Hon. Hannibal Hamlin. Harper's Weekly. A Journal of Civilization 4(178): 322.

ANONYMOUS (1861a): --. The Burlington Weekly Hawk-Eye (Burlington, Iowa) (30th March 1861) p. 1.

ANONYMOUS (1861b): Brighton Election of Postmaster. Washington Press (Washington, Iowa) (23rd January 1861) 5(34): 1.

ANONYMOUS (1862): The Massachusetts Register, 1862 Containing a Record of the Government and Institutions of the State, together with a very complete account of the Massachusetts volunteers. Serial Number, Ninety-Four. Adams, Sampson, & Co, Boston.

ANONYMOUS (1863a): Consumption Cured. Daily Democrat and News (Davenport, Iowa) (21st December 1863) 9(48): 1.

ANONYMOUS (1863b): Died. The Washington Press (Washington, Iowa) (11th February 1863) 7(34): 3.

ANONYMOUS (1864): The Pennsylvania Freedmen's Society. The Pittsburgh Gazette (Pittsburgh, Pennsylvania) (20th December 1864) 78(1): 3.

ANONYMOUS (1865): A Slight Mistake. The Washington Press (Washington, Iowa) (8th March 1865) 9(37): 3

ANONYMOUS [attributed to M.T. DUNLAP] (1866a): Champaign County Fair. Contest Between Durham and Devon – Grain and Vegetables – Agricultural Implementations – List of Awards. Chicago Tribune (17th September 1866) 20(104): 1.

ANONYMOUS (1866b): Italian Bees. Tests of Purity. American Bee Journal 2(3): 58.

ANONYMOUS (1866c): --. The Prairie Farmer (18th August 1866) 18(7): 108. [Advertisement].

ANONYMOUS (1866d): --. The Prairie Farmer (1st September 1866), 18(9): 142. [Advertisement].

ANONYMOUS (1866e): Iowa Land Claims. Muscatine Weekly Journal (Muscatine, Iowa) (8th June 1866) 17(47): 1.

ANONYMOUS (1866f): Americans in Paris. First Reception of the Season at the Tuileries. The Chicago Tribune (Chicago, Illinois) (8th February 1866) 19(249): 2.

ANONYMOUS (1866g): From Europe. A Visit to the Country Palace. Immense Possessions of the Liechtenstein Family. The Chicago Tribune (Chicago, Illinois) (18th September 1866) 20(105): 2.

ANONYMOUS (1867a): How much honey do bees consume in making a pound of wax? The Prairie Farmer (20th April 1867) 19(16) N.S.: 260 [including a reply by Ellen S. Tupper].

ANONYMOUS [a.k.a. MINNIE C.B.] (1867b): The Apiary – Work to Do. The Prairie Farmer 19(18) N.S.: 301.

ANONYMOUS (1867c): The Swamp Land Embezzlement Case. Muscatine Weekly Journal (Muscatine, Iowa) (2nd August 1867) 19(1) N.S.: 2.

ANONYMOUS (1867d): New York Correspondence. Daily Davenport Democrat (Davenport, Iowa) (11th February 1867) 12: 1.

ANONYMOUS (1867e): The Baby's Friend. Mrs. Winslow's Soothing Syrup – A Visit to her Laboratory – Preparations for the Maintenance of Domestic Quiet – Printing Enterprise, &c.. Daily Davenport Democrat (Davenport, Iowa) (24th July 1867) 12: 2.

ANONYMOUS (1867f): The Orwig Case. Cedar Falls Gazette (Cedar Falls, Iowa) (9th August 1867) 8(19): 2.

ANONYMOUS (1867g): Here and there in Washington County. Brighton. The Washington County Press (Washington, Iowa) (14th August 1867) 12(5): 3.

ANONYMOUS (1868): Col. Forney's Account. The Daily Harrisburg Telegraph (Harrisburg, Pennsylvania) (19th May 1868): 1.

ANONYMOUS (1869a): Sorosis on the farm. The Prairie Farmer. A Weekly Journal – Farm, Orchard and Fireside 40(16): 121.

ANONYMOUS (1869b): Constitution of the National Woman Suffrage Association. Pamphlet, dated ca. 1869 and not later than 1872, as presented in the exhibition "Shall Not Be Denied – Women

Fight For Vote”, June 4th, 2019 – September 2020, Library of Congress, Thomas Jefferson Building, as presented in the online exhibition: <https://www.loc.gov/exhibitions/women-fight-for-the-vote/about-this-exhibition/seneca-falls-and-building-a-movement-1776-1890/family-friends-and-the-personal-side-of-the-movement/movemnet-splits-and-former-friends-choose-sides/>. (Last accessed: 19.12.2019).

ANONYMOUS (1869c): The Bee-Keepers’ Journal. Nebraska Advertiser (Brownville, Nebraska) (4th March 1869) 13(21): 4 [Advertisement].

ANONYMOUS (1869d): The Bee-Keepers’ Journal and Agricultural Directory. Nebraska Advertiser (Brownville, Nebraska) (25th March 1869) 13(24): 4 [Advertisement].

ANONYMOUS (1869e): A Millionaire Merchant. The Davenport Daily Democrat (Davenport, Iowa) (24th May 1869) 14: 2.

ANONYMOUS (1869f): Report of the Cherokee delegation of their mission to Washington in 1868 and 1869. [Separate print]

ANONYMOUS (1869g): --. [Advertisement] The Atchinson Daily Champion (Atchinson, Kansas) (22nd December 1869): 3.

ANONYMOUS (1869h): Died. Semi-Weekly Burlington Hawk-Eye (Burlington, Iowa) (5th May 1869): 3.

ANONYMOUS (1870a): --. [Advertisement] Wyandot County Republican (21st January 1870): p. 3.

ANONYMOUS (1870b): --. The Dubuque Daily Times (Dubuque, Iowa) (18th December 1870) 15(266): 1.

ANONYMOUS (1870c): Complimentary. – The Nonpareil. The Brighton Pioneer and Home Visitor (Brighton, Iowa) (13th August 1870) 3(3):3.

ANONYMOUS (1871a): The Bee Business. Sioux City Journal (Sioux City, Iowa) (13th August 1871): 4.

ANONYMOUS (1871b): The American Beekeepers’ Association. The Southern Farmer 5(4): 157–158.

ANONYMOUS (1871c): Clark Dunham. Cedar Falls Gazette (Cedar Falls, Iowa) (28th April 1871) 12(5): 1.

ANONYMOUS (1871d): North American Bee-Keepers’ Society. The Prairie Farmer. A Weekly Journal – Farm, Orchard and Fireside 42(50): 382.

ANONYMOUS (1871e): A young lady apiarian in Illinois. The Waterloo Courier (Waterloo, Iowa) 13(6): 3.

ANONYMOUS (1871f): Ladies Attend ! Bee-Keepers’ Journal and National Agriculturist 12(2): 12.

ANONYMOUS (1871f): The American Bee-Keepers’ Association at Cleveland. The Bee-Keepers’ Journal and National Agriculturist 12(11): 84.

ANONYMOUS (1871g): Changing Base. The Waterloo Courier (Waterloo, Iowa), (18th May 1871) 12(48): 4.

ANONYMOUS (1871h): Bee-Keepers’. Daily Iowa State Register (Des Moines, Iowa) (1st February 1871) 10(26): 4.

ANONYMOUS (1872a): Keeping bees strong in numbers. The Findlay Jeffersonian (Findlay, Ohio) (19th July 1872): 4.

ANONYMOUS (1872b): North American Bee Keepers' Society. The National Bee Journal -3(16): 533-537.

ANONYMOUS (1872c): The Illinois Press Association. Pleasant re-union at Champaign. The Ottawa Free Trader (29th June 1872) 32(47): 4.

ANONYMOUS (1872d): Illinois Press Association. The Prairie Farmer. A Weekly Journal for the Farm, Orchard and Fireside 43(26): 204.

ANONYMOUS (1872e): No Extension. Bee-Keepers' Journal and National Agriculturist 13(4): 28.

ANONYMOUS (1872f) Work for Women. From the New York Tribune. Bee-Keepers' Journal and National Agriculturist 13(11): 81. [Attributed to Ellen S. Tupper]

ANONYMOUS (1872g): Transactions of the North American Bee Keepers' Society, at their First Annual Session, held at The City of Cleveland, On Wednesday, Thursday and Friday, December 6-8, 1871. Publishing Committee D.L. Adair, H.A. King, N.C. Mitchell, Indianapolis, Indiana.

ANONYMOUS (1872h): Minor Items. The Boston Daily Globe, Morning Edition (Boston, Massachusetts) (12th October 1872) 2(89): 5.

ANONYMOUS (1872i): Iowa Condensed. The Daily Gazette, Morning Edition (Davenport, Iowa) (6th October 1872) 18: 2.

ANONYMOUS (1872j): North American Bee Keepers' Association. The National Bee Journal 3(1): 1-10.

ANONYMOUS (1872k): Second Annual Meeting of the Iowa Bee Keepers' Association, p. 311-318. In: Annual report of the Iowa State Agricultural Society, for the year 1871. G.W. Edwards, State Printer, Des Moines.

ANONYMOUS (1872l): Washington, D.C. The Judiciary Committee of the House of Representatives receiving a deputation of female suffragists, January 11th - a lady delegate reading her argument in favor of woman's voting, on the basis of the Fourteenth and Fifteenth Constitutional Amendments. Illus. in: Frank Leslie's Illustrated Newspaper 31(801): 349. Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA.
<https://www.loc.gov/item/2004670399/>

ANONYMOUS (1873a): An Iowa woman. Mrs. Ellen S. Tupper, the Iowa Bee-Culturist, and her work. The Chicago Daily Tribune (Chicago, Illinois) (30. July 1873) 26(344): 2.

ANONYMOUS (1873b): A Successful Woman. Mrs. Ellen S. Tupper, the bee culture and her work. The National Bee Journal 4(7): 209-212.

ANONYMOUS (1873c): National Beekeepers' Association. Transactions of the North American Beekeepers' Society, at their Second Annual Session, held at the city of Indianapolis, on Wednesday, Thursday and Friday, December 4-6, 1872. American Bee Journal 8(7): 145-167.

ANONYMOUS (1873d): Iowa Bee-Keepers' Association. The Bee-Keepers' Magazine 1: 70.

ANONYMOUS (1873e): Fifth Biennial Report of the Board of Trustees of the Iowa State Agricultural College and Farm, made to the Governor of Iowa for the years 1872 and 1873. B.P. Clarkson, State Printer, Des Moines.

ANONYMOUS (1873f): --. The Woman's Journal 4(30): 237.

ANONYMOUS (1873g): Notes and News. The Woman's Journal 4(34): 269.

ANONYMOUS (1873h): The Political Advancement of Woman. The Muscatine Weekly Journal (Muscatine, Iowa) (31st October 1873), 34: 2.

ANONYMOUS (1873i): Iowa Woman Suffragists. Mass convention of the Friends of the Woman Suffrage. The Daily Iowa State Register (Des Moines, Iowa) (5th March 1873) 12(54): 4.

ANONYMOUS (1873j): A Lady recommended for a Consulship. Intelligencer Journal (Lancaster, Pennsylvania) (12th February 1873) 9(140): 2.

ANONYMOUS (1873k): The other side. The Daily Iowa State Register (Des Moines, Iowa) (21st February 1873) 12(44): 4.

ANONYMOUS (1873l): The President and the Women. The Baltimore Sun (Baltimore, Maryland) (18th March 1873) 72(103): 1.

ANONYMOUS (1873m): Female Writers of Iowa. The Dubuque Herald (Dubuque, Iowa) (3rd June 1873) 20(No. 6430): [1].

ANONYMOUS (1873n): Iowa Literacy Ladies. Daily Davenport Democrat (Davenport, Iowa) (4th June 1873) 18: 2.

ANONYMOUS (1873o): --. The Sioux County Herald (Orange City, Iowa) (25th July 1873) 2(43): 2

ANONYMOUS (1874a): Injustice Exemplified. The New Northwest (Portland, Oregon), 4(9) (23. October 1874): 1.

ANONYMOUS (1874b): Bees for Sale. The Woman's Journal (5th September 1874) 5(36): 283.

ANONYMOUS (1874c): A Model Iowa Home. The Woman's Journal (31st October 1874): 348.

ANONYMOUS (1874d): Papers and Letters presented at the First Women Congress of the Association for the Advancement of Woman, held at the Union League Theatre, October 1873. Mrs. Wm. Ballard, Book and Job Printer, New York.

ANONYMOUS (1874e): -- The Inter Ocean (Chicago, Illinois) (5th March 1874) 2(298): 7.

ANONYMOUS (1874f): -- [Correspondence]. The National Bee Journal 5(1): 19.

ANONYMOUS (1874g): Woman Suffrage Meeting. Daily Iowa State Register (Des Moines, Iowa), Morning Edition, (10th February 1874), 13(34): 4.

ANONYMOUS (1874h): Woman Suffrage Meeting. Daily Iowa State Register (Des Moines, Iowa), Morning Edition, (15th February 1874), 13(39): 4.

ANONYMOUS (1874i): Our Special Correspondence from the Capital. Daily Davenport Democrat (Davenport, Iowa) (6th March 1874) 9: 4.

ANONYMOUS (1874j): Hard up for arguments. The Daily Iowa State Register (Des Moines, Iowa) (8th March 1874) 13(57): 4.

ANONYMOUS (1874k): Communication. The Daily Iowa State Register (Des Moines, Iowa) (8th March 1874) 13(57): 4.

ANONYMOUS (1874l): Items in Brief. The Daily Iowa State Register (Des Moines, Iowa) (6th March 1874) 13(55): 4.

ANONYMOUS (1874m): A Des Moines Girl Successful. The Daily Iowa State Register (Des Moines, Iowa) (20th October 1874) 13(247): 4.

ANONYMOUS (1874n): Iowa Items. Sioux City Journal (Sioux City, Iowa) (22nd October 1874) 5(195): 2.

ANONYMOUS (1874o): Iowa City. The Oratorical Contest. The Davenport Democrat (Davenport, Iowa) (7th November 1874) 20: 1.

ANONYMOUS (1874p): One of our Des Moines Girls. The Daily Iowa State Register (Des Moines, Iowa) (23rd October 1874) 13(250): 4.

ANONYMOUS (1874q): Iowa Items. The Sioux City Journal (Sioux City, Iowa) (25th October 1874) 5(198): 2.

ANONYMOUS (1874r): --. The Daily Iowa State Register (Des Moines, Iowa) (6th November 1874) 13(262): 1.

ANONYMOUS (1874s): Polk County Woman Suffrage Association. The Daily Iowa State Register (Des Moines, Iowa) (8th May 1874) 13(107): 4.

ANONYMOUS (1874t): Resolutions. The Daily Iowa State Register (Des Moines, Iowa) (8th April 1874) 13(83): 4.

ANONYMOUS (1874u): An Account of the Proceedings on the Trial of Susan B. Anthony, on the Charge of Illegal Voting, at the Presidential Election in Nov., 1872, and on the Trial of Beverly W. Jones, Edwin T. Marsh and William B. Hall, The Inspectors of Election by whom Her Vote was received. Daily Democrat and Chronicle Book Print, Rochester, N.Y.

ANONYMOUS (1874v): Woman Suffrage. Proceedings of the American Association at Detroit Yesterday. The Courier-Journal (Louisville, Kentucky) (15th October 1874) 47(2,166 N.S.): 1.

ANONYMOUS (1874w): The Beecher-Tilton Scandal: A Complete History of the Case, from November, 1872, to the present time, with Mrs. Woodhull's Statement, as published in Woodhull & Claflin's Weekly, November 2d. 1872. F.A. Bancker, New York.

ANONYMOUS (1874x): The Great Brooklyn Romance. All the Documents in the famous Beecher-Tilton case, unabridged. J.H. Paxon, New York.

ANONYMOUS (1874y): Fun among the bees. Daily Iowa State Register (Des Moines, Iowa) (13th August 1874) 13(189): 4.

ANONYMOUS (1875a): Homer A. King, The Eminent Apiarian. The Bee-Keepers' Magazine 3(8): 164-167.

ANONYMOUS (1875b) Proceedings of the Board of Trustees. November Meeting, 1875, p. 183. In: Sixth Biennial Report of the Board of Trustees of the Iowa State Agricultural College. And Farm, made to the Governor of Iowa, for the years 1874 and 1875. R P. Clarkson, State Printer, Des Moines.

ANONYMOUS (1876a): The Italian Bee Co. - Dissolution. [Advertisement] Gleanings in Bee Culture 1876: 69.

ANONYMOUS (1876b): Keepers' Column. Bee Culturist in Warm Quarters. The Los Angeles Daily Herald (Los Angeles, California) (17th March 1876) 5(145): 1.

ANONYMOUS (1876c): "A bee in her bonnet". The Inter-Ocean (Chicago, Illinois) (3rd February 1876): 3.

ANONYMOUS (1876d): Forgeries by a Woman. The Case of Mrs. Ellen S. Tupper, the Noted Iowa Bee Culturist. The Chicago Tribune (Chicago, Illinois) (2nd February 1876) 29(160): 3.

ANONYMOUS (1876e): A sad case. The Chicago Daily Tribune (Chicago, Illinois) (30th January 1876), 29(157): 12.

ANONYMOUS (1876f): Mrs. Tupper's Condition. The Chicago Daily Tribune (Chicago, Illinois) (7th February 1876) 29(165): 2.

ANONYMOUS (1876g): Iowa News. The Muscatine Weekly Journal (Muscatine, Iowa) (11th February 1876) 34: 1.

ANONYMOUS (1876h): --. The Muscatine Weekly Journal (Muscatine, Iowa) (18th February 1876) 34: 1.

ANONYMOUS (1876i): --. The Sioux City Journal (Sioux City, Iowa) (30th September 1876): 2.

ANONYMOUS (1876j): The "Bee Queen". The Davenport Democrat (Davenport, Iowa) (15th September 1876) 21: 1.

ANONYMOUS (1876k): --. The Anamosa Eureka (Anamosa, Iowa) (11th May 1876) 20(33): 4

ANONYMOUS (1876l): --. The Anamosa Eureka (Anamosa, Iowa) (1st June 1876) 20(36): 2

ANONYMOUS (1876m): Arrest of Mrs. Tupper. She was taken in custody at her home in Dakota and is now in jail at Davenport. The Fort Dodge Messenger (Fort Dodge, Iowa) (21st September 1876) 12(43): 4

ANONYMOUS (1876n): Arrest of Mrs. Tupper. The Noted Apiarist Brought to Davenport from Dakota and Lodged in Jail – The Charges Against Her, and what she says. The Davenport Gazette 22(270): 4.

ANONYMOUS (1876o): Mrs. Tupper. The Davenport Daily Democrat (Davenport, Iowa) (15th March 1876) 21: 1.

ANONYMOUS (1876p): State Items. The Davenport Daily Democrat (Davenport, Iowa) (14th February 1876) 21: 4.

ANONYMOUS (1876q): --. The Courier (Waterloo, Iowa) (29th March 1876) 17(42): 1.

ANONYMOUS (1876r): Mrs. Tupper's Forgeries. Is She Insane? The Emporia Ledger 5(38): 4.

ANONYMOUS (1876s): --. The Daily Davenport Democrat (Davenport, Iowa) (4th February 1876) 21: 4.

ANONYMOUS (1877a) Papers read at the Fourth Congress of Women, held at St. George's Hall, Philadelphia, October 4,5,6, 1876. Names and Addresses of Officers and Members of the Association for the Advancement of Woman, History of the Association. Todd Brothers, Book and Job Printers, Washington D.C..

ANONYMOUS (1877b): Mrs. Tupper. The Bee-Keepers' Magazine 5(4): 79–80.

ANONYMOUS (1877c): "Not Guilty." Such is the Verdict in the Tupper Case, Arrived at after Fifteen Hours' Deliberation. The Davenport Democrat (Davenport, Iowa) (26th February 1877) 22: 1.

ANONYMOUS (1877d): District Court – May Term, 1877. The Davenport Democrat (Davenport, Iowa) (16th May 1877) 22: 1.

ANONYMOUS (1878a): The History of Marshall County, Iowa: Containing a History of the County, its Cities, Towns &c.. Western Historical Company, Chicago.

ANONYMOUS (1878b): Beloit Items. The Canton Advocate (Canton, Dakota Territory) (6th March 1878) 3(44): 1.

ANONYMOUS (1880): The history of Washington County, Iowa, containing a History of the county, its Cities, Towns, &c.. Union Historical Company, Des Moines.

ANONYMOUS (1882a): History of Penobscot County. Maine, with Illustrations and Biographical Sketches. William, Chase & Co., Cleveland.

ANONYMOUS (1882b): The Bar's Sorrow. The Davenport Sunday Democrat (Davenport, Iowa) (17th September 1882) 27: 1.

ANONYMOUS (1882c): Untimely Fate. Death of Hon. Hugh M. Martin. The Davenport Democrat (Davenport, Iowa) (30th August 1882) 27: 1.

ANONYMOUS (1887a): British Colombia News. The San Francisco Examiner (San Francisco, California) (4th August 1887) 45(35): 2.

ANONYMOUS (1887b): How Omaha was named. The Indiana State Sentinel (Indianapolis, Indiana) (6th April 1887) 33(10): 7. [Reprint from the Omaha Bee]

ANONYMOUS (1888a): Dust to Dust. Argus-Leader (Sioux-Falls, South Dakota) (19th March 1888): 4.

ANONYMOUS (1888b): The Case of Mrs. Tupper. The Noted Woman's Offense in Davenport – Her Numerous Forgeries – How she Worked the Scheme – Her Remarkable Trial Here and Scenes that Attended it – How a Daughter Captured the Jury – An interesting recital. Davenport Democrat-Gazette (Davenport, Iowa) (13th March 1888): 1.

ANONYMOUS (1888c): Mrs. Ellen S. Tupper. The Graham County Democrat (Millbrook, Kansas) (12th April 1888) 3(23): 3.

ANONYMOUS (1888d): Ellen S. Tupper Dead. The Brighton Enterprise (Brighton, Iowa) (17th March 1888) 7(5): 4.

ANONYMOUS (1889a): Walter N. Smith. In: Congressional Record (Fiftieth Congress, Second Session) Volume XX, Part I, p. 954, 963, & 966.

ANONYMOUS (1889b): Nelson Marvin Beckwith. The New York Times (25th September 1889) 39 (No. 11,880): 4.

ANONYMOUS (1890a): Lovell Harrison. In: Portrait and biographical album of Peoria County, Illinois: containing full page portraits and biographical sketches of prominent and representative citizens of the county, together with portraits and biographies of all the Presidents of the United States and governors of the State. Biographical Publishing Co., Chicago.

ANONYMOUS (1890b): Immigration Investigation. Italians come in spring and return in winter – Norwegians, Swedes and Hebrews. The Indianapolis Journal (Indianapolis, Indiana) (26th April 1890): 5.

ANONYMOUS (1893a): Mrs. L. Harrison. The American Bee Journal 31(15): 458–459.

ANONYMOUS (1893b): --. The Washington Democrat (Washington, Iowa) (10th May 1893) 15(38): 3.

ANONYMOUS (1894): Woman's Council – Many Papers read at its Opening. Education is the Theme. Kindergarten and Public School System Reviewed. Should Be Clear of Politics. The San Francisco Call, Morning Edition (San Francisco, California) (1st May 1894) 75(132): 3.

ANONYMOUS (1895): Five Representative Bee-Women. The American Bee Journal 35(36): 565.

ANONYMOUS (1899): Local Reminiscences: I. The Cholera Scourge. The Brighton Enterprise (Brighton, Iowa) (16th December 1899) 18(46): 1.

ANONYMOUS (1900a): Alumni 1848. The Brown Alumni Monthly 10(7): 156.

ANONYMOUS (1900b): The Tupper Family. Brighton Enterprise (Brighton, Iowa) (21st April 1900) 19(12): 1.

ANONYMOUS (1900c): Woman raid a saloon. The Brighton Enterprise (Brighton, Iowa) (27th January 1900) 18(52): 1.

ANONYMOUS (1900d): Pork Packing in Brighton. The Brighton Enterprise (Brighton, Iowa) (6th January 1900) 18(49): 4.

ANONYMOUS (1900e): A Sea Captain. The Brighton Enterprise (Brighton, Iowa) (28th April 1900) 19(13): 1.

ANONYMOUS (1901): Hon. P.M. Sutton Dead. Ex-Senator of Marshall County Dies after an Illness of Sixteen Years. At One Time Was One of the Ablest Criminal Lawyers of the State—His Career. Remains to Be Cremated, Complying With His Request – Funeral Thursday. Evening Times-Republican (Marshalltown, Iowa) (19th November 1901) 27(247): 8.

ANONYMOUS (1904): Notable Deaths. James Callanan. Annals of Iowa 6(7): 559–560.

ANONYMOUS (1905): Largest Private Library in Iowa. Col. H.W. Scofield of Washington owns it. Eighteen Thousand Copies. The Collection of a Lifetime in Books. Began the Collection at the Close of the Civil War and has continued it. The Register and Leader (Des Moines, Iowa) (16th July 1905) 56(14): 20

ANONYMOUS (1906a): Infant Feeding. The Feeding and Care for Infants – The Selection and Home Modification of Cow's Milk. Circular issued by the Illinois State Board of Health.

ANONYMOUS (1906b): Old Time Locals. Washington Press (Washington, Iowa) (17th January 1906) 50(33): 4.

ANONYMOUS (1908): Nostrums and quackery; articles on the nostrum evil and quackery. First Edition. Press of the American Medical Association, Chicago.

ANONYMOUS (1910): Mrs. Winslow's Soothing Syrup – Another Baby Sacrificed. New England Medical Monthly 29(8): 180–181.

ANONYMOUS (1912a): The Newton Theological Institution. General Catalogue. Eleventh Edition. Newton Centre Massachusetts.

ANONYMOUS (1912b): Some Sketches from Brighton's Early Days. Important Events During Years 1854 to 1882 – The Cholera Scourge, The Bread Famine, The Railroad War and Pork Packaging in Brighton. The Brighton Enterprise (Brighton, Iowa) (14th December 1912) 31(48): 10–12.

ANONYMOUS (1912c): Socialist favor Trusts. Mrs. Mila Tupper Maynard Socialist Speaker, Thinks Effort to Bust The is Foolish. The Brainerd Daily Dispatch (Brainerd, Minnesota) (2nd January 1912) 11(178): 3.

ANONYMOUS (1914): Lydia C. Tupper dies from heart failure. Was active in Plymouth Church under Beecher. The Brooklyn Times (Brooklyn, New York) (7th May 1914) 77: 4.

ANONYMOUS (1917): The Control of fertilization. The American Bee Journal 67(8): 263.

ANONYMOUS (1918): Progress of Settlement. The Washington Standard (Olympia, Washington) 58(20): 7.

ANONYMOUS (1919): Maine, My State. The Journal Print Shop, Lewiston, Maine.

ANONYMOUS (1920): Death of a Lady Beekeeper of International Fame. The American Bee Journal 60(3): 83.

ANONYMOUS (1921): Another Women Beekeeper. The American Bee Journal 61(1): 22.

ANONYMOUS (1926): A Circuit Rider Passes. Asbury Park Evening Press (Asbury Park, New Jersey) (13th April 1926) 40(87): 10.

ANONYMOUS (1934): Early history of Brighton from Enterprise files - Early residents stamp out Cholera epidemic with lime. The Brighton Enterprise (Brighton, Iowa) (30th August 1934) 53(35): 1 & 3.

ANONYMOUS (1949): Sugar Reports. U.S. Department of Agriculture. Production and Marketing Administration. Sugar Branch. July 7, 1949, No. 5. Washington D.C.

ANONYMOUS (1951): Early Chicago ties link big publishers. Tribune, Prairie Farmer and Rand Roots Twine. CHICAGO DAILY TRIBUNE (CHICAGO, ILLINOIS) (17th SEPTEMBER 1951) 110(223) PART 1:12.

ANONYMOUS (1952): Rounding Out a Century, 1852-1952: Bangor Savings Bank. Bangor Savings Bank, Bangor, Maine. Books and Publications. 205; https://digicom.bpl.lib.me.us/books_pubs/205.

ANONYMOUS (1962): History and Operations of the U.S. Sugar Program. Prepared by the staff of the Committee on Agriculture with the assistance of the Sugar Division of the U.S. Department of Agriculture. U.S. Government Printing Office, Washington.

ANONYMOUS (1989): A Team of Elks. The Washington Evening (Washington, Iowa) (15th June 1989) 97(86): 44.

ANONYMOUS (2000): Hotel Savery – Rich in Des Moines History. The Des Moines Register (Des Moines, Iowa) (19th July 2000): 142. [Advertising Supplement – Des Moines Register].

ARMSTRONG, W.C. (1860): The Life and Adventures of Captain John Smith: Comprising an account of his travels in Europe, Asia, Africa and America. Also, the early history of Virginia and New England; including sketches of Pocahontas, Powhatan, Opechancanough, and other distinguished characters. H. Dayton, New York.

ATWOOD, R.A. (1980a): Handwritten Newspapers on the Iowa Frontier, 1844–54. Presented to the History Division, Association for Education and Journalism, Annual Convention, Boston, Massachusetts, August 1980. (Student Competition, Warren C. Price Award).

- ATWOOD, R.A. (1980b): Handwritten Newspapers on the Iowa Frontier, 1844–1854. *Journalism History* 7(2): 56–67.
- BAKER, J.H. (2006): *Sisters. The Lives of American's Suffragists*. Hill and Wang, New York.
- BALDENSBERGER, P.J. (1918): Beekeeping for Women. *The American Bee Journal* 58(2): 53–54.
- BAILEY, M.J. (1994): *American Women in Science. A Biographical Dictionary*. ABC Clio, Denver (Colorado), Santa Barbara (California) and Oxford (England).
- BANCROFT, H.H. (1890): *The Works of Hubert Howe Bancroft. History of Washington, Idaho and Montana. 1845–1889. Volume XXXI*. The History Company, Publishers, San Francisco.
- BARBER, J.W. (1872): *King Alcohol, and his Prime Minister*. Designed and engraved by J.W. BARBER. Library of Congress Prints and Photographs Division, Washington D.C <http://hdl.loc.gov/loc.pnp/pga.04327> .
- BARBOUR, F.C.W. (1910): *Spelman genealogy; the English ancestry and American descendants of Richard Spelman of Middletown, Connecticut, 1700*. Frank Allaben Genealogical Company, New York.
- BARNES, F.C. (1891): *Autobiographical sketch of Rev. Royal Crafts Spaulding; and extracts from letters of himself, and of his wife, Jerusha Bryant Spaulding, with notes and explanatory text*. Press of William H. Smith, Houlton, Maine.
- BASLER, R.P., PRATT, M.P., DUNLAP, L.A. [Eds.] (1953): *The Collected Works of Abraham Lincoln*. The Abraham Lincoln Association Springfield, Illinois. Ruttgers University Press, New Brunswick, New Jersey.
- BATES, C.G. (ed.) (2015): *The Early Republic and Antebellum America: An Encyclopedia of Social, Political, Cultural and Economic History*. Volume 1-4. Routledge, London – New York.
- BAUSE, G.S. (2012): Mrs. Winslow's Soothing Syrup. *Anesthesiology* 116: 8.
- BEARD, J.F. [ed.] (1960): *The Letters and Journals of James Fenimore Cooper*. Volume II. The Belknap Press of Harvard University Press, Cambridge, Massachusetts.
- BECK, J.M. (1984): *Joseph Howe. The Briton Becomes Canadian 1848–1873*. Volume II. McGill-Queen's University Press, Kingston and Montreal.
- BENTON, F. (1908): Government Help in Apiculture. II. National Work. *Pacific Rural Press* (28th November 1908)76(22): 344.
- BIGELOW, J. (1909): *Retrospections of an Active Life*. Two Volumes. The Baker & Taylor Co., New York.
- BITTER, P.H.V. (1978): History of Canadian Geology Charles Jackson, MD (1805-1880) and Francis Alger (1807–1863). *Geoscience Canada* 5(2):79–82.
- BLAIR, W., SIMPSON, C.M. & SMITH, H.N. (eds.) (1997): *Mark Twain's Notebooks & Journals, Volume I: (1855–1873)*. University of California Press, Berkeley and Los Angeles.
- BLAKE, W.P. (eds.) (1870): *Reports of the United States Commissioners to the Paris Universal Exposition, 1867*. Published under direction of the Secretary of State by authority of the Senate of the United States. Government Printing Office, Washington.

BOARDMAN, S.L. (1903): *The naturalist of the Saint Croix*. Memoir of George A. Boardman. Privately Printed, Bangor.

BODDEN, V. (2013): *Mark Twain*. Great American Authors. ABDO, Minnesota.

BOICE, C.A. (1958a): Claims Republican Party Organized in Washington County. *Washington Evening Journal* (Washington, Iowa) (30th June 1958) 66(116): 33.

BOICE, C.A. (1958b): Doctors Came to County With Earliest Settlers. Physician Read "Declaration" at First Fourth of July Celebration in 1839. *Washington Evening Journal* (Washington, Iowa) (30th June 1958)66(116): 55.

BOLTON, H.C. (1885): *A catalogue of scientific and technical periodicals, (1665 to 1882): together with chronological tables and a library checklist*. Published by the Smithsonian Institution, Washington.

BONHAM, J. (1883): *Fifty years' recollections with observations and reflections on historical events: giving sketches of eminent citizens, their lives and public services*. J.W. Franks & Sons, Printers and Publishers, Peoria, Illinois.

BONNER, J.C. (2009): *History of Georgia Agriculture, 1732–1860*. University of Georgia Press, Athens.

BONNEUIL, C. (2016): Pure lines as industrial simulacra. A cultural history of genetics from Darwin to Johannsen, pp. 213-242. In: MUELLER-WILLE, S. & BRANDT, C. (eds.), *Heredity Explored. Between Public Domain and Experimental Science, 1850 -1930*, Cambridge, MA, MIT Press.

BRANCH, E.M., FRANK, M.B., SANDERSON, K.M., SMITH, H.E., SALAMO, L. & BUCCI, R. (eds.) (1988): *Mark Twain's Letters*. Volume 1. 1853-1866. University of California Press, Berkeley.

BREITENBACH, C.J. (1980): *Trading with the enemy: legal theory and the Civil War*. Dissertations, Theses, and Masters Projects. The College of William and Mary in Virginia. Paper 1539625103. <https://dx.doi.org/doi:10.21220/s2-4wdk-7y69>.

BROCKETT, L.P. (1868): *Men of our day: or, Biographical sketches of patriots, orators, statesmen, generals, reformers, financiers and merchants, now on the stage of action: including those who in military, political, business and social life, are the prominent leaders of the time in this country*. Published by Zeigler, McCurdy & Co., Philadelphia, Cincinnati and Chicago.

BROOKS, T.E. (2002): *Calais Maine Families: They came and they went*. Heritage Books, Inc., Bowie, Maryland.

BUCKNER, P. (1998): TUPPER, Sir CHARLES. In: *Dictionary of Canadian Biography*, vol. 14, University of Toronto/Université Laval, (last accessed January 17, 2020), http://www.biographi.ca/en/bio/tupper_charles_14E.html.

BUECHLER, S.M. (1987): Elizabeth Boynton Harbert and the Woman Suffrage Movement, 1870–1896. [Women and the Political Process in the United States] (Autumn, 1987), *Signs* 13(1): 78–97.

BULLARD, L.J.C. & KOHN D.M. (2010): *Christine or Woman's Trials and Triumphs*. University of Nebraska Press, Lincoln.

BURRAGE, H.S. (1919): *Maine in the Northeastern boundary controversy*. Printed for the State, Marks Printing House, Portland, Maine.

BURRELL, H.A. (1909): *History of Washington County, Iowa. From the First White Settlements to 1908. Also Biographical Sketches of Some Prominent Citizens of the County. Volume 1.* The S. J. Clarke Publishing Company, Chicago.

CALKIN, H. L. (1978): *Women in the Department of State: Their Role in American Foreign Affairs.* Department of State, Washington D.C., <https://files.eric.ed.gov/fulltext/ED179481.pdf>.

CAPO, F. (2011): *Myth and Mysteries of New York: True Stories of the Unsolved and Unexplained.* GPP, Guilford, Connecticut.

CARROL, M.P. (1984): Alligators in the sewer, dragons in the well and Freud in the toilet: Some Contributions to the Psychoanalytic Study of Urban Legends. *The Sociological Review* 32(1): 57–74.

CATHCART, W. (ed.) (1881): *The Baptist Encyclopaedia.* Louis H. Everts, Philadelphia.

CHAPIN, J.R. (1874): Women's whisky war in Ohio, sketched by John R. Chapin. Illus. in: Frank Leslie's *Illustrated Newspaper* 37: 413. Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA. <https://www.loc.gov/pictures/item/98511188/>

CHMIELEWSKI, W. (2006): World-Famous Polish Beekeeper – Dr. Jan Dzierzon (1811–1906) and his work in the centenary year of his death. *Journal of Apicultural Research* 45(3):162–164.

CHO, A. H., Johnson, S.A., Schuman, C.E., Adler, J.M., Gonzalez, O., Graves, S.J., Huebner, J.R., Marchant, D.B., Rifai, S.W., Skinner, I., Bruna, E.M. (2014): Women are underrepresented on the editorial boards of journals in environmental biology and natural resource management. *PeerJ* 2: e542.

COLE, J.C. (2008): 'She will not submit to be ignored': Kate Douglas Wiggin and performing American femininity at the turn of the twentieth century. Dissertation submitted to the Faculty of the Graduate School of the University of Maryland, College Park.

COLEMAN, L. (1979): Alligators-in-the-sewers: A journalistic origin. *The Journal of American Folklore* 92(365): 335–338.

COLEMAN, L. (1996): Alligators in the Sewers. Pp. 153-166 in BENNETT, G. & SMITH P (eds.) *Contemporary Legend. A Reader.* Garland Publishing Inc., New York and London.

CONNELLY, D.B. (2006): *John M. Schofield & the Politics of Generalship.* The University of North Carolina Press, Chapel Hill.

COULTER, E.M. (1916): Effects of Secession upon the Commerce of the Mississippi Valley. *The Mississippi Valley Historical Review* 3(3): 275–300.

COULTER, E.M. (1919): Commercial Intercourse with the Confederacy in the Mississippi Valley, 1861-1865. *The Mississippi Valley Historical Review* 5(4): 377–395.

CRAIUTU, A. & JENNINGS, J. (eds.) (2009): *Tocqueville on America After 1840: Letters and Other Writings.* Cambridge University Press, Cambridge.

CRAMER, J.M. (2000): For Women and the War: A Cultural Analysis of the Mayflower, 1861-1864. Pp. 209-226 in SACHSMAN, D.B., RUSHING, S.K. & VAN TUYLL, D.R. (eds.) *The Civil War and the Press.* Transaction Publisher, New Brunswick (U.S.A.) and London (U.K.), p. 209–226.

CRAMER, J.S. (ed.) (2009): *The Maine Woods.* Henry D. Thoreau. Yale University Press, New Haven and London.

- CRANE, E. (1999) *The World History of Beekeeping and Honey Hunting*. Routledge, New York.
- CREESE, M.R.S. (1998): *Ladies in the Laboratory? American and British Women in Science 1800–1900*. The Scarecrow Press, Inc., Lanham, Md., & London.
- CROMIE, A.H. (1975): *A tour guide to the Civil War. The complete travellers companion to battlegrounds, sites, museums, relics and landmarks*. Second Edition, revised and updated. E.P. Dutton & Co. Inc., New York.
- CURRIER & IVES (1874): *Woman's holy war. Grand charge on the enemy's works*. Retrieved from the Library of Congress, <https://www.loc.gov/item/2003656595/>. [Published by Currier & Ives, New York, ca. 1874].
- CUTTING, H.D., SECOR, E. & MASON, A.B. (eds.): (1893): *Report of the Proceedings of the Twenty-Fourth Annual Convention of the North American Bee-Keepers' Association held at Chicago, Ill., October 11, 12 and 13, 1893*, pp. 130-227. In: *Second Annual Report of the Illinois State Bee-Keepers' Association, organized February 26th, 1891, at Springfield, Illinois*. Compiled by JAMES A. STONE, Secretary. Illinois State Register Book Publishing House, Springfield, Illinois.
- DADANT, M.G. & GROUT R.A. (2010): *American Bee Journal* editors W.F. Clarke and Ellen S. Tupper. *American Bee Journal* 150(3): 223–225.
- DAVIS, R.H. (1882): *Home Industries for Women. Bee-Keeping. The Youth's Companion* (9th November 1882): 467–468.
- DELOMBARD, J.M. (2002): *Representing the Slave: White Advocacy and Black Testimony in Harriet Beecher Stowe's "Dred"*. *The New England Quarterly* 75(1): 80–106.
- DEMING, J.K. (1904): *Genealogy of the descendants of John Deming of Wethersfield, Connecticut*. Mathis-Mets Co., Dubuque, Iowa.
- DESAI, M.S. & DESAI, P.S. (2015): *Discovery of Modern Anesthesia: A Counterfactual Narrative about Crawford W. Long, Horace Wells, Charles T. Jackson, and William T. G. Morton*. *AANA journal*, 83(6): 410–415.
- DESMOND, J.R. (1994): *Maine and the Elections of 1860*. *The New England Quarterly* 67(3): 455–475.
- DILLER, D.C. & ROBERTSON, S.L. (1989): *The presidents, first ladies, and vice presidents: White House biographies, 1789–1989*. Congressional Quarterly Inc., Washington D.C.
- DIXON, J.M. (1876) *Centennial History of Polk County*. State Register, Print, Des Moines.
- DORR, J.M. (1874): *Drones and Queens*. *The Iowa State Register* (Des Moines, Iowa) (19th May 1874) 13(115): 1.
- DORR, R.C. (1928): *Susan B. Anthony: The Woman who Changed the Mind of a Nation*. Frederick A. Stokes Company, New York.
- DOWNER, H.E. (1910): *History of Davenport and Scott County Iowa. Illustrated. Volume 1*. The S.J. Publishing Company, Chicago.
- DUNLAP, E. [a.k.a ELLA] (1871a): *The Apiary. Bee-Keepers in Council at Cincinnati – They Condemn the Use of Tobacco smoke – Wintering – Troubles in Bee-Keeping – Species of Bees – Use of Salt – Machine Strained Honey – Seasonable Work*. *The Chicago Tribune* (6th March 1871) 24(214): 4.

DUNLAP, E. [a.k.a ELLA] (1871b): The Apiary. The Bee-Moth, its Natural History, and How We Are to Combat it – The Drone Bee – A Drone in Which some Valuable Suggestions are Presented. The Chicago Tribune (27th March 1871) 24(235): 2.

DUNLAP, E. [a.k.a ELLA] (1871c): The Apiary. Enemies of the Bee – Transferring Bees from Nail-Kegs or Box-Hives to Movable-Frame Hives. The Chicago Tribune (3rd April 1871) 24(241): 2.

DUNLAP, E. [a.k.a ELLA] (1871d): The Apiary. Beekeeping for the Past Two Years – Cleaning Desoluted Hives – When to Examine the Swarms – What the Bees Are Now Doing – Dead Swarms. The Chicago Tribune (13th November 1871) 25(98): 2.

DUNLAP, E. [a.k.a ELLA] (1871e): The Apiary. Wintering of Bees – In Cellars, in Rooms, and on Summer Stands – Care of the Surplus Boxes and Frames. The Chicago Tribune (22nd November 1871) 25(107): 1.

DUNLAP, E. [a.k.a ELLA] (1871f): The Apiary. A Contest Among the Patent-Hive Men – The Best Bee-Hive – Looking After the Bees – The Apiary as a Source of Profit to Girls – How to Set Up the Business. The Chicago Tribune (29th November 1871) 25(114): 3.

DUNLAP, E. [a.k.a ELLA] (1871g): The Apiary. How Nature Provides for the Queen Bee – The Rearing and Sale of Defective Queens – Novelties in Bee-Culture Not Desirable. The Chicago Tribune (13th December 1871) 25(127): 3.

DUNLAP, E. [a.k.a ELLA] (1871h): The Apiary. Hiving Bees in the City – Bee Pasturage in California – Hoeny Dew Produced by Insects. The Chicago Tribune (20th December 1871) 25(134): 3.

DUNLAP, E. [a.k.a ELLA] (1871i): The Apiary. The Value of Small Swarms, and their Management – What to Do with Queenless Swarms – The Crisis of Bee-Culture. The Chicago Tribune (27th December 1871) 25(138): 6.

DUNLAP, E. [a.k.a ELLA] (1872a): The Apiary. A sufferer by the Great Fire desires to become and Apiarian – Some things he will need to do in order to succeed. The Chicago Tribune (3rd January 1872) 25(145): 6.

DUNLAP, E. [a.k.a ELLA] (1872b): The Apiary. Do Bees Eat Grapes? – Their Value in The Orchard – Winter Feeding. The Chicago Tribune (10th January 1872) 25(155): 6.

DUNLAP, E. [a.k.a ELLA] (1872c): The Apiary. Meeting of the North American Bee-Keepers' Association. Discussion on Artificial Swarming, Methods for Handling Bees – Honey-Plants Recommended. The Chicago Tribune (18th January 1872) 25(163): 3.

DUNLAP, E. [a.k.a ELLA] (1872d): The Apiary. Bee-Keeping in a Village – Some Rights that Pertain to Woman in this Pursuit. The Chicago Tribune (29th January 1872) 25(174): 2.

DUNLAP, E. [a.k.a ELLA] (1872e): The Apiary. Bee-Keeping Forty Years Ago – Wild Bees and Wild Honey. Ventilation by the Wild Bee-Bee-Keeping on the Prairie. The Value of Moveable Frames in Relation to the Bee-Moth – A Good Word for the Patent-Hive Man. The Chicago Tribune (5th February 1872) 25(181): 2.

DUNLAP, E. [a.k.a ELLA] (1872f): The Apiary. Errors in Ventilation, as Shown from Practical Experience. The Chicago Tribune (13th February 1872) 25(189): 6.

DUNLAP, E. [a.k.a ELLA] (1872g): The Apiary. Feeding Bees is to Stimulate Breeding. Effects of Drouth on Wintering Bees. The Chicago Tribune (23rd February 1872) 25(199): 3.

DUNLAP, E. [a.k.a ELLA] (1872h): The Apiary. Why We Should Look After the Bee-Feeding Candy – Yields of Honey. The Chicago Tribune (4th March 1872) 25(209): 6.

DUNLAP, E. [a.k.a ELLA] (1872i): The Apiary. Progress of Apiculture as a Science – Bee-Keepers' Meeting – Ventilation of Hives – Untimely Death of Bees. The Chicago Tribune (11th March 1872) 25(216): 4.

DUNLAP, E. [a.k.a ELLA] (1872j): The Apiary. Hive-Cleaning in the Spring – Dysentery Among the Bees – The Probable Cause and Cure. The Chicago Tribune (18th March 1872) 25(223): 1.

DAWSON, J. (1857): The Temperance Movement. Washington Pres (Washington, Iowa) (27th May 1857) 2(3): 2.

DUNLAP, E. [a.k.a ELLA] (1872k): The Apiary. Locating an Apiary-Desirable Points of a Location. The Chicago Tribune (25th March 1872) 25(230): 6.

DUNLAP, E. [a.k.a ELLA] (1872l): The Apiary. Substitute for Pollen-Food for Young Bees – Dead Swarms – Ladies as Bee-Keepers. The Chicago Tribune (1st April 1872) 25(237): 2.

DUNLAP, E. [a.k.a ELLA] (1872m): The Apiary. The Bees at the Opening of Spring – Danger of Robber Bees at This Time – How to Detect Them – The Way to Prevent Robbing – Pollen for the Bees. The Chicago Tribune (8th April 1872) 25(237): 2.

DUNLAP, E. [a.k.a ELLA] (1872n): The Apiary. Honey Improved by Art. A Simple Method Given. Rendering an Indifferent Article of Honey Good – Sugar and Syrup versus Honey. The Chicago Daily Tribune (2nd December 1872) 26(105): 5.

DUNLAP, E. [a.k.a ELLA] (1872o): North American Bee-Keepers' Society. Objects of These Meetings – The Cause of the Fatality of the Past Winter – Italian vs. Black Bees – The Boiling of Honey – A blanket for the Bees. The Chicago Daily Tribune (9th December 1872) 26(112): 5.

DUNLAP, E. [a.k.a ELLA] (1872p): The Apiary. Normal Condition [sic] of Bee-Culture South and North of the Ohio, Compared with Present Condition. The Chicago Daily Tribune (16th December 1872) 26(119): 3.

DUNLAP, E. [a.k.a ELLA] (1872q): The Apiary. Bee-Keeping as Connected with the Farm or Suburban Homestead. The Chicago Daily Tribune (23rd December 1872) 26(126): 2.

DUNLAP, E. [a.k.a ELLA] (1873a): The Apiary. A Challenge – On the Stand – A Paradise for Bees – A New Mode of Dividing Bees and Producing Large Swarms – Farm Management of Bees. The Chicago Daily Tribune (6th January 1873) 26(140): 8.

DUNLAP, E. [a.k.a ELLA] (1873b): The Apiary. What May Be Done in the Apiary During the Winter – The Future Prospects of Bee-Keeping. The Chicago Daily Tribune (13th January 1873) 26(147): 5.

DUNLAP, E. [a.k.a ELLA] (1873c): The Apiary. Studies for Bee-Keepers During Winter – Connection of Entomology and Botany with Bee-Culture. The Chicago Daily Tribune (20th January 1873) 26(154): 5.

DUNLAP, E. [a.k.a ELLA] (1873d): The Apiary. Our Bees Among the Snow-Drifts – A Day in the Library Among Books and Papers—Introduction of Italian Bees – Old Idea in New Dress – Honey Dew Theories. The Chicago Daily Tribune (27th January 1873) 26(161): 8.

DUNN, W.H. (1922): The life of Donald G. Mitchell. Charles Scribner's Sons, New York.

- DURANT, M. (1950) Lizzie Read, Career Woman, Algona's First Editor in 1865. Edited UDM By Horse & Buggy, Back in 1865. The Algona Upper Des Moines (Algona, Iowa) (24th October 1950) 85(42) [Third Section]: 5.
- DURDEN, R.F. (1956): James S. Pike: President Lincoln's Minister to the Netherlands. The New England Quarterly 29(3): 341-364.
- DURDEN, R.F. (1957): James Shepherd Pike: Republicanism and the American Negro, 1850-1882. Duke University Press, Durham, N.C..
- EDMONDSON, E.L. (1919): Original Notice. In the District Court of Iowa in and for Washington County. September Term 1919. CHARLEY L. STONE, Plaintiff. Brighton Enterprise (Brighton, Iowa) (10th July 1919) 38(28): 2.
- EGBERT, J. (2009): Alligators in the Sewers? Really? Learning and Leading with Technology 36(7): 28-30.
- ELLIOTT, R.R. (1987): History of Nevada. Second Edition. University of Nebraska Press.
- ENGLISH, E.H. (1953): Iowa Republicans Organized in 1856. The Annals of Iowa 32: 43-46.
- ENSS, C. (2020): No Place for a Woman. The Struggle for Suffrage in the Wild West. A Twodot Book, Lanham.
- FANNIE (1872): Girls at the Agricultural College. The Spirit of Kansas, 17th August 1872, p. 8.
- FENWICK, S. (2017): The Archives of the Royal Entomological Society. Pp. 31-40 in PEDERSEN, B. (eds.) A Guide to the Archives of the Royal Entomological Society. Routledge.
- FISCHER, V., FRANK, M.B. & SALAMO, L. (eds.) (1995): Mark Twain's Letters. Volume 4. 1870-1871. University of California Press, Berkeley, Los Angeles, London.
- FLITNER, S.E. (1889): Flitner Family. Maine Historical and Genealogical Recorder 6(3): 417-421.
- FRANCIS, J., NEPTUNE, N. & SMITH, S.W. (1852): "1852-02-28 Treaty of Peace Among the Passamaquoddy Tribe" (1852). Documents. 62. https://digitalmaine.com/native_tribal_docs/62
- FRY, J.A. (1982): Eyewitness by proxy: Nelson M. Beckwith's evaluation of Garibaldi, September 1861. Civil War History 28(1): 65-70.
- GALLUP, E. (1868): Italian Queens, Pure Fertilization, and Bee Books. The American Bee Journal 4(5): 90.
- GEE, R.S. (1870): Letter to J.B. Hemingway, M.D., Physician and Surgeon by Appointment of his excellency, Lucius Fairchild, Governor of the State of Wisconsin, to the Institution for the Education of the Deaf and Dumb. "Republican" Book Press Print, Delavan, Wis.
- GERSTAKER, A. (1866): The Bee in America. American Bee Journal 2(1): 1-5.
- GIBBONS, H. (1874): Illustrations of the Literature of Quackery. Pacific Medical and Surgical Journal, June 1874. Separate Print, p. 1-20.
- GIENAPP, W.E. (1987): The Origins of the Republican Party, 1852-1856. Oxford University Press, New York - Oxford
- GINZBERG, L.D. (2009): Elizabeth Cady Stanton. An American Life. Hill and Wang, New York.

- GOLD, D.M. (2012): *An Exemplary Whig: Edward Kent and the Whig Disposition in American Politics* Lexington Books, Lanham – Boulder – New York – Toronto – Plymouth (UK)
- GRAVENHORST, C.J.H. (1870): Ein neues Verfahren die Königinnen zu befruchten. *Deutscher Bienenfreund, Zeitung für praktische Bienenzucht* 6: 38–41.
- GRAVENHORST, C.J.H. (1871a): Verfahren der Frau Tupper, die Befruchtung der jungen Königin mit jeder gewünschten Drohne sicher zu bewirken. *Bienen-Zeitung* 27(2): 17–19.
- GRAVENHORST, C.J.H. (1871b): Imkerspäne 23. Neues Verfahren, die Königin willkürlich befruchten zu lassen. *Bienen-Zeitung* 27(12+13): 156–158.
- GRAVENHORST, F. (1887a): Ist die Bienenzucht eine Beschäftigung für Frauen? *Deutsche illustrierte Bienenzeitung* 4(3): 73–76.
- GRAVENHORST, C.J.H. (1887b): Andreas Schmidt. *Deutsche Illustrierte Bienenzeitung* 4(1): 5–6.
- GRAY, A. (1848): *A Flora of Maine, illustrated with specimens from Nature, arranged according to the Natural System, and containing Descriptions of all the known Indigenous Plants growing in the State, etc.; by Aaron Young, Jr. Bangor. 1848. Vol. I. The American Journal of Science and Art Ser. 2 Vol. 5 (No. 13–16): 453.*
- GREELEY, H. (1872): *The Autobiography of Horace Greeley or Recollections of a busy life.* E.B. Treat, New York.
- GRIFFIN, J. (1872): *History of the Press of Maine. From the Press, Established, Brunswick.* [Private Print].
- GRIFFIN, A.J. (2003): *Intelligence versus Impulse: William H. Seward and the threat of war with France over Mexico, 1861–1867.* PhD Thesis, University of New Hampshire.
- GRIMKE, A.E. (1838a): Letters to Catherine E. Beecher, in Reply to An Essay on Slavery and Abolitionism, addressed to A.E. Grimke. Printed by Isaac Knapp, Boston.
- GRIMKE, S.M. (1838b): Equal Rights. Letter XV. Man equally guilty with woman in the fall. *The Liberator* (Boston, Massachusetts) (16th February 1838) 8(7): 28.
- GRIMM, A. (1867a): Purity of Italian Bees. *The American Bee Journal and Gazette* 2(12): 228.
- GRIMM, A. (1867b) Purity of Drones. *The American Bee Journal* 3(6): 109–110.
- GUE, B.F. (1903): *History of Iowa from the earliest times to the beginning of the Twentieth Century.* Vol. 4, The Century History Company, New York City.
- GUINN, J.M. (1915): *A history of California and an extended history of Los Angeles and environs. Biographical – Volume II.* Historic Records Company, Los Angeles.
- HACHTEN, H. & ALLEN, T. (2009) *The Flavor of Wisconsin. An informal history of food and eating in the Badger State.* Revised and Expanded Edition. Wisconsin Historical Society Press.
- HALE, W.B. (1912): *Woodrow Wilson, the story of his life.* Doubleday, Page & Company, Garden City & New York.
- HAMLIN, E.L. (1841): [Land Offer] State of Maine, Land Office. *Bangor Daily Whig & Courier* (16th November 1841) 8(113): 1.
- HAMLIN, H. (1860): [Handwritten letter from Hannibal Hamlin to Abraham Lincoln [???] to introduce John Stickney], 17th September 1860. In: *Abraham Lincoln papers: Series 1. General*

Correspondence. 1833–1916: Hannibal Hamlin to Abraham Lincoln, Monday, September 17, 1860 (Introduction). <https://www.loc.gov/resource/mal.0372500/?r=0.175,0.755,1.371,0.851,0>.

HAMLIN, C.E. (1899): *The Life and Times of Hannibal Hamlin*. Printed at the Riverside Press, Cambridge.

HAMLIN, S.M. (1936): *The Hamlins of New England; descendants of James and Anna Hamlin, Barnstable county, Massachusetts, 1639–1936*. Privately Printed.

HAMLIN, C. (2009): *Cholera: The Biography*. Oxford University Press, Oxford.

HAMLIN, K.A. (2014): *From Eve to Evolution: Darwin, Science, and Women's Rights in Gilded Age America*. The University of Chicago Press, Chicago and London.

HAMMEL, T. (2019): *Gender, Class and Competition. Shaping Natural History and Settler Society. Mary Elizabeth Barber and the Nineteenth-Century Cape*. Cambridge Imperial and Post-Colonial Studies (Series eds: DRAYTON R. & DUBOW, S.). Palgrave MacMillan, Cham, Switzerland.

HANAFORD, P.A. (1877): *Women of the Century*. Published by B.B. Russell, Boston.

HANAFORD, P. A. (1883): *Daughters of America; or, Women of the century*. True and Company, Augusta, Me.

HANSON, E.R. (1882): *Our Woman Workers. Biographical Sketches. Women Eminent in the Universalist Church for Literary, Philanthropic and Christian Work*. Second Edition. The Star and Covenant Office, Boston.

HARIDAS, R.P., & BAUSE, G.S. (2013): Correspondence by Charles T. Jackson containing the earliest known illustrations of a Morton ether inhaler. *Anesthesia & Analgesia*, 117(5), 1236–1240.

HARIDAS, R.P., & BAUSE, G.S. (2017): A Newly Discovered Manuscript of Charles T. Jackson, MD: "History of the Patenting of the Application of Sulphuric Ether for the Production of Insensibility". *Journal of Anesthesia history* 3, no. 2 (2017): 37–46.

HARIDAS, R.P., & BAUSE, G.S. (2018): A Newly Discovered Manuscript of Charles T. Jackson, MD, on the Preparation and Administration of Anesthetics for Humans and Animals. *Journal of Anesthesia History*, 4(3): 163–170.

HARPER, I.H. (1898): *The Life and Work of Susan B. Anthony*. In two volumes. The Hollenbeck Press, Indianapolis.

HARRISON, K. (1870): Biographical Sketch. *The Bee-Keepers' Journal and National Agriculturist* 11(1): 1.

HARRISON, L. (1881): Bee-Keeping as Woman's Work. *The American Bee Journal* 17(2): 11.

HARRISON, L. (1886): Remedies for Foul Brood. *The Prairie Farmer* 58(46): 749.

HARRISON, L. (1889): Looking over the apiary. *The Prairie Farmer* 61(15): 243.

HARRISON, L. (1890): Swarms in April. *The Prairie Farmer* 62(18): 283.

HAVELIN, K. (2007): *Victoria Woodhull: Fearless Feminist*. Twenty-First Century Books, Minneapolis.

HAYWARD, J. (1841): Appendix to *Hayward's New England Gazetteer; And Specimens of the Northern Register*. Wm. White, Printer, Spring Lane.

HEACOCK, C.C. (1900): Local Reminiscences of the Early History of Brighton, Iowa. Enterprise Press, Brighton, Iowa.

HENRY, J. (ed.) (1862): Annual Report of the Board of Regents of the Smithsonian Institution, showing the operations, expenditures, and condition of the institution for the year 1861. Government Printing Office, Washington D.C..

HERRMANN, A.J. (2007): Demon Rum, Devious Politics: The Lessons of Neal Dow 's Crusade for the Maine Prohibition Law. Honor's Thesis, Department of History, Colby College. Paper 266. <https://digitalcommons.colby.edu/honorsthesis/266/>

HICKS, F.C. (1921): Men and books famous in the law. The Lawyers Co-Operative Publishing Co., Rochester and New York.

HIGGINSON, T.W. (1870): Army Life in a Black Regiment. Fields, Osgood, & Co., Boston.

HILDRETH, M.H. (1976): Harriet Beecher Stowe. A Bibliography. Archon Books.

HINELINE, M. (1988): Charles Thomas Jackson and the First Geological Survey of Maine, 1836-1838. Maine Geological Survey. Studies in Maine Geology 1: 1-16.

HINSDALE, B.A. (1884): Bounding the Original United States. Magazine of Western History 2(5): 401-423.

HOOLIHAN, C. [ed.] (2008): An Annotated Catalogue of the Edward C. Atwater Collection of American Popular Medicine and Health Reform. Volume III, Supplement A-Z. University of Rochester Press, Rochester, N.Y..

HORN, T. (2005): Bees in America: How the Honey Bee Shaped a Nation. The University Press of Kentucky, Lexington.

HORN, T. (2012): Inventresses - Ellen Tupper: Editor, Beekeeper, Queen Producer. In: Beeconomy. What woman and bees can teach us about local trade and global market. The University Press of Kentucky, Lexington, p. 169-175.

HUBBARD, M. (2013): Illinois's War: The Civil War in Documents. Ohio University Press, Athens.

HUNTER, J.D. [Secretary] (1866): Report of the Investigating Committee Appointed by the Eleventh General Assembly of Iowa, To Inquire into the Alleged Diversion of the Swamp Land Indemnity Fund. F.W. Palmer, State Printer, Des Moines.

INGERSOLL, L.D. (1873): The Life of Horace Greeley: Founder of the New York Tribune, with extended notices of many of his contemporary statesmen and journalists. Union Publishing Company, Chicago.

INGHAM, H. (1922): The Algona Bee: A Story of Newspaper Beginnings. Private Print.

JACKSON, C.T. (1835): Sugar poisoned with oxide of lead. The Medical Magazine (15th June 1835) 3(22): 716-720.

JACKSON, C.T. (1852): Essay by Dr. Charles T. Jackson, of Boston Massachusetts. Lead pipes used as conduits for drinking water, contrasted with pure block tin pipes. Brief history of lead diseases. Oliver & Brother, Printers, New York.

JACKSON, L. (2016): Lead Poisoning a Dark Chapter in Calais' Past. Calais Advertiser (21st April 2016): 5.

JEFFERSON, T. (1854): *The Writings of Thomas Jefferson: Being his Autobiography, Correspondence, Reports, Messages, Addresses, and other Writings, Official and Private*. Vol. VIII. Taylor & Maury, Washington D.C.

JENSEN, J. (1965): Does this settle the debate? *Little Crawfordsville: True Birthplace Of The Republican Party*. *Sunday Times-Democrat (Davenport – Bettendorf, Iowa)* (3rd October 1965): 4D [p. 56].

JOY, C.A. (1870): *The History of Chloroform*. *The Medical Gazette, A Weekly Review of The Medical Sciences* 5: 274–275.

KALMUS, H. & SMITH C.A.B. (1948): Production of pure lines in bees. *Journal of Genetics* 49(2): 153–158.

KARON, A. (2010): A Sweet Tradition Endures on Iowa Farms. *Iowa Heritage Illustrated* 91(4): 154–160.

KECK, I.A. (1869): *History of Washington County*. *Annals of Iowa* 7(1): 76–90.

KELLEN, W.V. (1902): *Henry Wheaton, an Appreciation: Being the Address Delivered Before the Alumni of Brown University of the Occasion of the One Hundredth Anniversary of his Graduation, June Seventeen, MDCCCII*. Merrymount Press, Boston.

KENDALL, P. M. (1896): *Maria Mitchell. Life, letters, and Journals*. Lee and Shepard Publishers, Boston.

KLEINE, G. (1866) Rev. George Kleine of Color, as a Test of Purity in Italian Bees. *The American Bee Journal* 2(6): 119.

KING, N.H. & KING, H.A. (1870): *The Bee-Keeper's Text-Book with alphabetical index being a Complete Reference Book on all practical subjects connected with the culture of the honey bee in both common and moveable-comb hives, giving minute directions for the management of bees in every month of the year, and illustrating the Nucleus System of Swarming and Italian Bee rearing*. Tenth Revised Edition and Twenty-Fifth Thousand. H. A. King & Co., New York.

KING, A.J. (1879): *The new bee-keepers' text-book*. Orange Judd Company, New York.

KING, M. (1918): Racing the Stingers. *The American Bee Journal* 58(3): 95.

KINSLEY, P. (1943): *The Chicago tribune, its first hundred years*. Three Volumes. Alfred A. Knopf, New York.

KIRBY, J. & KIRBY, V.T. (2009): *Allen Tupper True: An American Artist*. Canyon Leap and Museum of the Rockies, Montana State University.

KNOWLTON, I.C. (1875): *Annals of Calais, Maine and St. Stephen, New Brunswick; including the village of Milltown, Me., and the present town of Milltown, N.B.*. J.A. Sears, Calais.

KOHLSTEDT, S.G. (1978): Maria Mitchell: The Advancement of Women in Science. *The New England Quarterly* 51(1): 39–63.

KOHLSTEDT, S.G. (1987): Maria Mitchell and the Advancement of Women in Science. In: *Uneasy careers and intimate lives: Women in Science, 1789-1979*. Pp. 129–146 in ABIR-AM, P.G. & OUTRAM, D (eds.): *The Douglas Series on Women's Lives and the Meaning of Gender*. Rutgers University Press, New Brunswick and London.

KOHN, D.M. (2004): Laura Jane Curtis Bullard (1831-1912). *Legacy* 21(1): 74–84.

KOPEL, D.B. (2012): Beecher's Bibles, pp. 77– 78. In: Carter G.L. (ed.), *Guns in American Society: An Encyclopedia of History, Politics, Culture, and the Law*. Second Edition. Volume I: A-F. ABC-Clio, Santa Barbara – Denver – Oxford (England)

KUPPERMAN, K.O. [ed.] (1988): *Captain John Smith. A selected edition of his writings*. University of North Carolina Press, Chapel Hill & London.

LANMAN, C. (1876): *Biographical annals of the civil government of the United States, during its first century. From original and official sources*. James Anglim, Publisher, Washington.

LEMAY, J.A.L. (2010): *Did Pocahontas Save Captain John Smith?* The University of Georgia Press, Athens and London.

LITTLER, N. (1881): *Sketches of Early Events in Washington County*. Chapter CXX. *Washington Gazette (Washington, Iowa)* (1st July 1881) 13(27): 1.

LOOBY, C. [Ed.] (2000): *The Complete Civil War Journal and Selected Letters of Thomas Wentworth Higginson*. The University of Chicago Press, Chicago and London.

LOTHROP, C.H. (1878): *The Medical and Surgical Directory of the State of Iowa*. L.P. Allen, Steam Printing and Binding, Clinton, Iowa.

MAROSKE, S., & MAY, T. W. (2018): Naming names: the first women taxonomists in mycology. *Studies in Mycology* 89: 63–84.

MATHEWS, M. W. & MCLEAN, L. A. (1886): *Early History and Pioneers of Champaign County. The bright and shady side of pioneer life*. Published by the Champaign County Herald, Urbana, Illinois.

McMURTRIE, D.C. (1935): *Directories of Iowa Newspapers, 1850–1869*. *The Annals of Iowa* 20(1): 11–25.

McNUTT, W.F. (1872): *Winslow's Soothing Syrup a Poison*. *The Pharmacist and Chemical Record. A Monthly Journal of Pharmacy, Chemistry and the Collateral Sciences* 5(5): 111–112.

MELTZER, M. (2002): *Mark Twain Himself. A Pictorial Biography*. University of Missouri Press, Columbia – London.

MIELEWCZIK, M. (2017): *Gregor Mendel as Entomologist*. *Entomologie heute* 29: 121–129.

MIELEWCZIK, M., FRANCIS, D.P., STUDER, B., SIMUNEK, M.V., HOSSFELD, U. (2017) *Die Rezeption von Gregor Mendels Hybridisierungsversuchen im 19. Jahrhundert – Eine bio-bibliographische Studie*. *Nova Acta Leopoldina NF* 413: 83–134.

MILLER, C.C. (1903): *Forty years among bees*. George W. York & Company, Chicago.

MILLER, C.C. (1916): *Dr. C. C. Miller's Personal Recollections. Life Story of America's Best known Beekeeper*. *The American Bee Journal* 56(3): 85–86.

MITCHELL, N.C. (1872): *The North American Bee Keepers' Convention*. *The National Bee Journal* 3(1): 22–25.

MONROE, J. (2002): *The Susan B. Anthony Women's Voting Rights Trial. A Headline Court Case*. Enslow Publishers, Inc. Berkeley Hights.

MOTT, D.C. (1925): *Early newspapers in State of Iowa vigorous, says Mott*. *The Knoxville Journal's Diamond Jubilee Edition* (1st October 1925): 4.

- MOTT, D.C. (1928): Early Iowa newspapers. A Contribution toward a bibliography of the newspapers established in Iowa before the Civil War. *Annals of Iowa* 16(3): 161–221.
- MOTT, D.C. (1936): William Duane Wilson. *The Annals of Iowa* 20: 360–374.
- MOTT, D.C. (1963): Farm, Stock, and Diary Journals. *The Palimpsest* 44(8): 341–366.
- MOTT, L. (2009): Callanan, Martha Coonley. Pp. 70–71 in: HUDSON, D., BERGMAN, M. & HORTON, L., (eds). *The Biographical Dictionary of Iowa*. University of Iowa Press, Iowa City.
- MÜLLEROTT, M. (1959): Dzierzon, Johannes. In: *Neue Deutsche Biographie* 4, p. 214 f. [Online-Version]; URL: <https://www.deutsche-biographie.de/pnd118862553.html#ndbcontent>
- NELSON, L.E. (2003): *American Presidents. Year by Year. Volumes 1–3. 1732–2000*. Routledge, London & New York.
- NEIDER, C. (ed.) & TWAIN, M. (1917): *The Autobiography of Mark Twain including chapters now published for the first time*. Chatto & Windus, London.
- NEWMAN, T.G. (1875a): Officious Meddlesomeness! *The American Bee Journal* 11(8): 170.
- NEWMAN, T.G. (1875b): The Bee Queen's Temptation. *The American Bee Journal* 12(3): 53–54.
- NEWMAN, T.G. (1886): A brief history of the North American bee-keepers' society, with a digest of its fifteen annual conventions, and a full report of the proceedings of the sixteenth annual convention, held at Detroit, Michigan, on Tuesday, Wednesday, and Thursday, December 8, 9 & 10, 1885. Office of the American Bee Journal, Chicago.
- NICOLAY, J.G. & HAY, J. (1914): *Abraham Lincoln. A History. Ten Volumes*. The Century Co., New York.
- NOLAN, W.J. (1929): Success in the artificial insemination of queen bees at the bee culture laboratory. *Journal of Economic Entomology* 22(3): 544–551.
- NOLAN, W. J. (1937): Improved apparatus for inseminating queen bees by the Watson method. *Journal of Economic Entomology* 30(5): 700–705.
- NORTH, S.N.D. (1880): *History and Present Condition of the Newspaper and Periodical Press of the United States, with a Catalogue of the Publications of the Census Year. Census Reports Tenth Census, Vol. 8*. Department of the Interior, Census Office, Government Printing Office, Washington.
- NORTON, A.H. (1935): Dr. Aaron Young, Jr. and the Botanical Survey of Maine. *The New England Botanical Club* 37(433): 1–15 [Separate Print].
- NOUN, L. (1969): *Strong-minded women: the emergence of the woman-suffrage movement in Iowa*. Iowa State University Press.
- NOUN, L. (1977): Annie Savery: a voice for Women's rights. *The Annals of Iowa* 44(1): 2–30.
- NOUN, L. (1985): Amelia Bloomer, a Biography. Part II. *The Suffragist of Councils Bluff*. *The Annals of Iowa* 47: 575–621.
- NOUN, L.R. (1996): Annie Savery: Pioneer feminist. *The Des Moines Register*, 4th August 1996, p. 17–18.
- NOUN, L. R. & BOHLMANN, R. E. (2002): *Leader and Pariah: Annie Savery and the Campaign for Women's Rights in Iowa*. Iowa Women's Archives, The University of Iowa Libraries.

- OERTEL, E. (1980): History of Beekeeping in the United States. Agriculture Handbook 335: 2–9.
- OGILVIE, M.B. & HARVEY, J.D. [eds.] (2000) The Biographical Dictionary of Women in Science: Pioneering Lives from Ancient Times to the Mid-20th Century. 2. Volumes. Routledge, New York and London.
- OGLE (1874): The Temperance Experience of Lady Ogle, Brighton. The Temperance Record - The Organ of the National Temperance League (4th April 1874) No. 939: 164–165.
- OLDT, F.T. & QUIGLEY P.J. (1911): History of Dubuque County, Iowa; being a general survey of Dubuque County history, including a history of the city of Dubuque and special account of districts throughout the county, from the earliest settlement to the present time. Goodspeed Historical Association, Chicago.
- OKAMOTO, M. (1982): The Maine Law of 1851: How the Prohibitionists made it. The American Review 16: 199–221.
- ORWIG, T.G. (1874a): Card. The Iowa State Register (Des Moines, Iowa) (17th May 1874) 13(114): 4.
- ORWIG, T.G. (1874b): Hot and Cold. The Iowa State Register (Des Moines, Iowa) (20th May 1874) 13(116): 4.
- PATTERSON, D., THOMPSON, R. & BRYSON, S. (eds.): Early American Nature Writers: A Biographical Encyclopedia. Greenwood Press, Westport (Connecticut) – London.
- PATTERSON, R. (1997): Dr Charles Thomas Jackson's aphasia. Journal of Medical Biography 5(4): 228–231.
- PATTERSON, R. (2001): Charles Thomas Jackson MD, Vesuvius, and the idea of surgical anaesthesia. Journal of Medical Biography 9: 220–225.
- PFLAUME, K. (1866): Einleitung zur Kenntniß der nordamerikanischen Landwirthschaft: Zunächst für Auswanderer. Georg Wigand's Verlag, Leipzig.
- PELLETT, F.C. (1917): How the women win. Three School Teachers Who Have Become Very Successful Beekeepers. The American Bee Journal 57(11): 372–373.
- PECK, G. (2000): Reinventing Free Labor: Padrones and Immigrant Workers in the North American West, 1830-1930. Cambridge University Press, University of Texas Austin.
- PELLETT, F.C. (1938): History of American Bee Keeping. College Press, Ames, Iowa.
- PIONEER [a.k.a. Ellen S. Tupper] (1886): Unselfishness. Pacific Rural Press (16th January 1886): 54.
- PIONEER [a.k.a. Ellen S. Tupper] (1887): Christmas among the blizzards. A strange story for young California readers. Pacific Rural Press (24th December 1887): 504.
- PIROK, A.R. (2011): Mrs. Satan 's Penance: The New History of Victoria Woodhull. Legacy 11(1): 35–50.
- PORTER, W. (1898): Annals of Polk county, Iowa, and city of Des Moines. Geo. A. Miller Printing Company, Des Moines.

- PRITCHARD, E. (1908): The regulation and control of the manufacture and sale of food and drugs for infants. A Paper read before the National Conference on Infantile Mortality, held at the Caxton Halls, Westminster, on the 23rd, 24th, and 25th March 1908. P.S. King & Son, Westminster.
- PROSCH, T.W. (1906): David S. Maynard and Catherine T. Maynard. Biographies of two of the Oregon immigrants of 1850. Lowman & Hanford Stationery & Printing Co., Seattle, Washington.
- QUINBY, M. (1859): Mysteries of Bee-Keeping explained: Being a complete Analysis of the whole subject. A.O. Moore Agricultural Book Publisher, New York.
- QUINBY, M. (1879): Quinby's New Bee-keeping: The Mysteries of Bee-keeping Explained. Orange Judd Company, New York.
- RAYMOND, M.M. (1888): Women n Newspaper Work. A Paper by Mrs. Mary Magoun Raymond before the Des Moines Woman's Club. Some of the Women Who Have Won Conspicuous Success in newspaper Work. A Record of Hard Work that is Very Complimentary to the Fair Sex – Some of the Qualifications of Good Newspaper Women. The Iowa State Register (24th May 1888): 6.
- REASE, W. H., (Lithographer) (1860): The Union must and shall be preserved. For President Abraham Lincoln of Illinois. For Vice President Hannibal Hamlin of Maine / lith. By William H. Rease, cor. 4th & Chestnut Sts., Philada., ca. 1860. [Philadelphia: Published by W.H. Rease, Philadelphia] Photograph. <https://www.loc.gov/item/2003690790/>.
- REED, E.W. (1992): Ellen Smith Tupper 1822–1888, pp. 176–180. In REED, E.W.: American Women in Science before the Civil War. University of Minnesota, Minneapolis.
- RICHARDSON, R. (1995): Emerson. The Mind on Fire. University of California, Berkeley – Los Angeles – London.
- RILEY, G. (1981): Frontierwomen, the Iowa experience. The Iowa State University Press, Ames.
- ROBBINS, S. (2011): Gendering Gilded Age Periodicals Professionalism. Reading Harriett Beecher Stowe's *Hearth and Home* Prescriptions for Women's Writing. In: Beyond Uncle Tom's Cabin: Essays on the Writing of Harriet Beecher Stowe [Eds.: Sylvia Mayer & Monika Mueller], Fairleigh Dickinson University Press, Madison – Teaneck.
- RODRIGUEZ, J.P. (2002): The Louisiana Purchase: A Historical and Geographical Encyclopedia. ABC Clio, Santa Barbara – Denver -Oxford.
- ROLAND, C.P. (1951): Louisiana Sugar Plantations During the Civil War. LSU Historical Dissertations and Theses. 7993. https://digitalcommons.lsu.edu/gradschool_disstheses/7993 .
- ROOT, A.I. (1891): The ABC of bee culture. Medina, Ohio.
- ROWELL, G.P. & Co. (1870): The Men who advertise; An account of successful advertisers together with hints and the method of advertising. Nelson Chesman, Publisher for Geo. P. Rowell & Co., Newspaper Advertising Agents, New York.
- RUTRICH, L. (1873): Ein Besuch bei Herrn Johann Dax. 37-39. Bienen-Vater: Organ des Wiener Bienenzüchter-Vereins 5:37–39.
- SANEFUJI N. & LEE, J.H.X. (2001): Hawaii Sugar Plantation. Pp. 601–602 in Lee, J.H.X. & Nadeau K.M. (eds.): Encyclopedia of Asian American Folklore and Folklife, Volume 1. ABC-Clio, Santa Barbara, California.
- SCHMIDT, L.B. (1950): The National Grange. The Palimpsest 31: 126–134.

- SCHMID, A. (1877) Erinnerungen an Adam Grimm. *Bienen-Zeitung* 33(7): 88.
- SCROGGINS, M. (1994): *Hannibal: The Life of Abraham Lincoln's First Vice President*. University Press of America, Lanham – New York – London.
- SEAMAN, G. L. (1942): A history of some early Iowa farm journals (before 1900). *Retrospective Theses and Dissertations*. Paper 16941. <https://lib.dr.iastate.edu/rtd/16941>
- SEARLEY & CLARK (1903): [Title missing]. *Washington Democrat* (Washington, Iowa) (28th January) 25(25): 3.
- SEGRAVE, K. (2007): Ellen Tupper. Pp. 78–79 in SEGRAVE, K (Eds.): *Women Swindler's in America, 1860–1920*. McFarland & Company, Inc., Publishers, Jefferson, North Carolina, and London.
- SHERMAN, S.E. (1891): Bee-Keeping for Women. *The American Bee Keeper* 1(6): 84–85.
- SEMLITSCH, A. (1871): Nur Sachte ! *Bienen-Zeitung* 27(4): 50.
- SEMLITSCH, A. (1872): Die Dax'sche und Tupper'sche Methode. *Bienen Zeitung* 28(7&8): 89–90.
- SEMLITSCH, A. (1874): Ueber Befruchtung im geschlossenen Raum. 30(14): 166–168.
- SIMMONS, M.T. (1851): Notice. *The Oregon Statesman* (2nd December 1851) 1(37): 3.
- SIMMS, W.G. (1846): *The Life of Captain John Smith. The founder of Virginia*. Geo. F. Cooledge & Brother, New York.
- SISSON, J.R. (1859): Map of Washington County, Iowa, 1859. Published by Lewis W. Vale. https://digital.lib.uiowa.edu/islandora/object/ui%3Asheetmaps_3 . Iowa Digital Library. [Note: Even though published in 1859 it is unclear which date individual quadrants were analysed. The map almost certainly seems to contain some mix-up of land ownerships from different years].
- SLOSSON, A.T. (1888): Southern Form of *E. scribonia*. *Entomologica Americana* 3(11): 212.
- SLOSSON, A.T. (1889a): A New Species of *Euphanessa*. *Entomologica Americana* 5(1): 7.
- SLOSSON, A.T. (1889b): A New *Spilosoma*. *Entomologica Americana* 5(2): 40.
- SLOSSON, A.T. (1889c): *Phragmatobia assimilans*. *Entomologica Americana* 5(5): 85–86.
- SLOSSON, A.T. (1889d): The Home of *Seirarctia Echo*. *Entomologica Americana* 5(8): 153–155.
- SLOSSON, A.T. (1890a): Larvae of *Seirarctia Echo*. *Entomologica Americana* 6(1): 8–9.
- SLOSSON, A.T. (1890b): *Cressonia Hyperbola* n. var. *Entomologica Americana* 6(3): 59.
- SLOSSON, A.T. (1890c): *Varina Ornata*. *Entomologica Americana* 6(7): 136.
- SLOSSON, A.T. (1892a): A long-lived basket maker. *Entomological News and Proceedings of the Entomological Section of the Academy of Natural Sciences of Philadelphia* 3: 49–51.
- SLOSSON, A.T. (1892b): A new *Arctia*. *Entomological News and Proceedings of the Entomological Section of the Academy of Natural Sciences of Philadelphia* 3: 257–258.
- SLOSSON, A.T. (1893a): COMMON versus PROPER. *Journal of the New York Entomological Society* 1(1): 1–5.

SLOSSON, A.T. (1893b): Collecting on Mt. Washington. - Part I. Entomological News and Proceedings of the Entomological Section of the Academy of Natural Sciences of Philadelphia 4(8): 249-252.

SLOSSON, A.T. (1893c): Collecting on Mt. Washington. - Part II. Entomological News and Proceedings of the Entomological Section of the Academy of Natural Sciences of Philadelphia 4(9): 287-292.

SLOSSON, A.T. (1894a): Florida Field Notes. Journal of the New York Entomological Society 2: 106-107.

SLOSSON, A.T. (1894b): Hyparpax, var. tyria, n. var. Entomological News and Proceedings of the Entomological Section of the Academy of Natural Sciences of Philadelphia 5: 198.

SLOSSON, A.T. (1894c): List of insects taken in alpine region of Mt. Washington. Entomological News and Proceedings of the Entomological Section of the Academy of Natural Sciences of Philadelphia 5(1): 1-6.

SLOSSON, A.T. (1894d): Mount Washington Again. Entomological News and Proceedings of the Entomological Section of the Academy of Natural Sciences of Philadelphia 5(1): 271-274.

SLOSSON, A.T. (1895a): Coleoptera of Lake Worth, Florida. The Canadian Entomologist 27: 9-10.

SLOSSON, A.T. (1895b): Additional list of insects taken in alpine region of Mt. Washington. Entomological News and Proceedings of the Entomological Section of the Academy of Natural Sciences of Philadelphia 6: 4-7.

SLOSSON, A.T. (1895c): Additional list of insects taken in alpine region of Mt. Washington. Entomological News and Proceedings of the Entomological Section of the Academy of Natural Sciences of Philadelphia 6: 316-321.

SLOSSON, A.T. (1895d): Collecting at Lake Worth, FLA. Entomological News and Proceedings of the Entomological Section of the Academy of Natural Sciences of Philadelphia 6: 133-136.

SLOSSON, A.T. (1895e): The Season on Mount Washington. Entomological News and Proceedings of the Entomological Section of the Academy of Natural Sciences of Philadelphia 6: 276-279.

SLOSSON, A.T. (1896a): Additional list of insects taken in alpine region of Mt. Washington. Entomological News and Proceedings of the Entomological Section of the Academy of Natural Sciences of Philadelphia 7: 262-265.

SLOSSON, A.T. (1896b): More About the Red Bug. Entomological News and Proceedings of the Entomological Section of the Academy of Natural Sciences of Philadelphia 7(2): 40-41.

SLOSSON, A.T. (1898a): List of Araneae taken in Franconia, New Hampshire. Journal of the New York Entomological Society 6: 247-249.

SLOSSON, A.T. (1898b): Additional list of insects taken in alpine region of Mt. Washington. Entomological News and Proceedings of the Entomological Section of the Academy of Natural Sciences of Philadelphia 9: 251-253.

SLOSSON, A.T. (1899): Collecting on Biscayne Bay. Entomological News and Proceedings of the Entomological Section of the Academy of Natural Sciences of Philadelphia 10: 94-96 & 124-126.

SMITH, C.R. (1930): The Iowa Homestead. The Palimpsest 11: 229-241.

SMITH, E.H. & SMITH, J.R. (1996): Charles Valentine Riley The Making of the Man and His Achievements. *The American Entomologist* 42(4): 228–238.

SMITH, E.S. (1843): A Sister's Influence. *Mother's Assistant and Young Lady's Friend* 3: 90–91.

SMITH, E.S. (1844a): She hath done what she could. *Mother's Assistant and Young Lady's Friend* 4: 15–17.

[SMITH, E.S.] published as E.S.S. (1844b): My Little Daughter. *Mother's Assistant and Young Lady's Friend* 4: 34–35.

SMITH, M.H. [ED.] (1877): Jeremiah Curtis and the soothing Syrup, p. 195–198. In: *Successful Folks. How They Win. Illustrated in the Career of Eight Hundred Eminent Men.* American Publishing Company, Hartford, Conn..

SMITH, N. (1855): Statement of Hon. Noah Smith, Jr., p. 158. In: CLUBB, H.S. (ed.): *The Maine Liquor Law: Its Origin, History, and Results, including a Life of Hon. Neal Dow.* Fowler and Wells, New York.

SMITH, N. (1860): [A Handwritten letter from NOAH SMITH to OZIAS M. HATCH to introduce JOHN SICKNEY], 18th September 1860, In: LINCOLN, ABRAHAM. *ABRAHAM LINCOLN papers: Series 1. General Correspondence. 1833 to 1916: Noah Smith to Ozias M. Hatch, Tuesday, Introduction. 1860.* Manuscript/Mixed Material. <https://www.loc.gov/item/mal0373600/>.

SPALDING, J.A. (1920): Young, Aaron (1819-1898), pp. 1278-1280. In: KELLY, H.A. & BURRAGE W.L. (eds.) (1920): *American Medical Biographies.* The Norman, Remington Company, Baltimore.

STANTON, E.C., ANTHONY, S.B. & GAGE M.J. (1881): *History of Woman Suffrage.* In two volumes. Fowler & Wells, New York.

STANTON, E.C. (1898) *Eighty years and more (1815-1897) Reminiscences of Elizabeth Cady Stanton.* "Social science affirms that woman's place in society marks the level of civilization." European Publishing Company, New York.

STANTON, T. & BLATCH H.S. [eds.] (1922): *Elizabeth Cady Stanton. As revealed in her letters, diary and reminiscences.* In two volumes. Harper & Brothers Publishers, New York and London.

STAPLES, A.G. (ed.) (1922): *The letters of John Fairfield; a representative in Congress from 1835 to 1837; a member of the Senate of the United States from 1843 to 1847, and a governor of Maine in 1839, 1840, 1842 and a part of 1843.* Lewiston Journal Company, Lewiston, Maine.

STRANGE, J.P. (2001): "A severe stinging and much fatigue" – Frank Benton and his 1881 search for *Apis dorsata*. *American Entomologist* 47(2): 112–117.

STUNTZ, S.C. & HAWKS, E.B. (1941): *List of Agricultural Periodicals of the United States and Canada published during the century July 1810 to July 1910.* Miscellaneous Publication No. 398, United States Department of Agriculture. United States Government Printing Office, Washington.

SVARVERUD, R. (2007): *International Law as World Order in Late Imperial China.* Translation, Reception and Discourse, 1847–1911. Brill, Leiden and Boston.

SWIERENGA, R.P. (1968): *Pioneers and profits: land speculation on the Iowa frontier.* The Iowa State University Press, Ames.

[TAYLOR, C.] (1859a): The Flea. *Harper's New Monthly Magazine* 19: 178–189.

TAYLOR, C. (1859b): Insects Destructive to Wheat. *Harper's New Monthly Magazine* 20: 38–52.

- TAYLOR, C. (1860a): The Silkworm. Harper's New Monthly Magazine 20: 753–764.
- TAYLOR, C. (1860b): Insects belonging to the Cotton Plant. Harper's New Monthly Magazine 21: 37–52.
- TAYLOR, C. (1860c): Spiders: Their Structure and Habitats. Harper's New Monthly Magazine 22: 323–334 & 461–477.
- TEMPLE, R. (1873): Ein Blick auf die geographische Verbreitung der Honigbiene. Die Honigbiene von Brünn 7(8): 127–128.
- THOMAS, M.F. (1874): The Methodists and Woman Suffrage. The Richmond Weekly Palladium (Richmond, Indiana) (30th September 1874) 44(29): 2.
- THOMPSON, J. (2017): Mysteries in Charles Miller's Life. Bee Culture. The American Magazine of Beekeeping. (27th October 2017), <https://www.beeculture.com/mysteries-dr-charles-c-millers-life/> (last accessed 11th January 2020).
- TILTON, T. (1871): Victoria C. Woodhull. A Biographical Sketch. The Golden Age, New York.
- TUCKER, C.G. (1990): Prophetic sisterhood. Liberal Women Ministers of the Frontier, 1880–1930. Beacon Press, Boston.
- TUPPER, A. (1839): B.N.H.S. [Bangor Natural History Society]. Bangor Daily Whig and Courier (28th May 1839) 5(281): 3.
- TUPPER, E.S. (1850a): Duty and Happiness. The Mother's assistant and young ladies' friend. July, 1850, to January 1851. Published by William C. Brown, Boston, 19: 61–70.
- TUPPER, E.S. (1850b): Happiness and Duty. The Mother's assistant and young ladies' friend. July, 1850, to January 1851. Published by William C. Brown, Boston, p. 19: 54–56. [Issue numbers in binding uncertain]
- TUPPER, E.S. [a.k.a. ELLEN] (1855): Life in Iowa. Home Mission Record, Containing the Correspondence, Receipts, etc., of the American Baptist Home Mission Society 6(8): 29.
- [TUPPER, E.S.] (1861a): Hints on Bee keeping. The Burlington Weekly Hawk-Eye (Burlington, Iowa) (30th March 1861): 1.
- [TUPPER, E.S.] (1861b): Hints on Bee Keeping. – No. 4. The Burlington Weekly Hawk-Eye (Burlington, Iowa) (20th April 1861): 1.
- [TUPPER, E.S.] (1861c): Hints on Bee Keeping. – No. 5. The Burlington Weekly Hawk-Eye (Burlington, Iowa) (4th May 1861):1.
- TUPPER, E.S. (1862): Bee Culture, pp. 62-68. In: WILSON, W.D. (ed.): Report. Office Sec'y. of Iowa State Ag'l. Col. And Farm. [Found bound into a volume of legislative documents from Iowa that started with the Inaugural Address of Iowa's Governor S.J. KIRKWOOD (1861): Biennial Message Delivered to the Iowa General Assembly, in Regular Session, Governor S.J. Kirkwood, Tuesday January 14, 1862, F.W. Palmer, State Printer, Des Moines.]
- TUPPER, E.S. (1863): Bee Keeper's Duties in May. The Washington Press (Washington, Iowa) (20th May 1863) 7(48): 1. [Reprint from the Iowa Homestead].
- TUPPER, E.S. (1864a): Essay on Bees -- 1st Premium. Pp. 212-234. In: SHAFFER, J.M. (ed.): Ninth Report of the Secretary of the State Agricultural Society to the Governor of the State for the Year 1863. F.W. Palmer, State Printer, Des Moines.

TUPPER, E.S. (1864b): Essay on Bees. The Iowa Homestead and Weekly Northwestern Farmer 9(13) N.S.: 98.

TUPPER, E.S. (1864c): Bee-Keepers Duties in May. The Iowa Homestead and Weekly Northwestern Farmer 9(15): 113.

TUPPER, E.S. (1864d): Bee-Keepers Duties in June. The Iowa Homestead and Weekly Northwestern Farmer 9(19): 146.

TUPPER, E.S. (1864e): Brood Comb and Young Bees in Winter. The Iowa Homestead and Weekly Northwestern Farmer 9(26): 2.

TUPPER, E.S. (1864f): Essay on Bees. The Iowa Homestead and Weekly Northwestern Farmer 9(14): 106–107.

TUPPER, E.S. (1864g): On the health of children. The Iowa Homestead and Weekly Northwestern Farmer 9(19): 155.

TUPPER, E.S. (1864h): Bee keeping. Annual Report Iowa State Agricultural Society 10: 143–158.

TUPPER, E.S. (1865a): Is the sex of the bee dependent on the cell? The Prairie Farmer 16 N.S. (20): 366–367.

TUPPER, E.S. (1865b): Italian versus Common Bees. The Prairie Farmer 15(13) N.S.: 232.

TUPPER, E.S. (1865c): Chapters on the Honey Bee. Number I. Its Natural History and Management. The Prairie Farmer 16(22) N.S.: 400.

TUPPER, E.S. (1865d): Chapters on the Honey Bee. Number II. Its Natural History and Management. The Prairie Farmer 16(24) N.S.: 433.

TUPPER, E.S. (1865e): Chapters on the Honey Bee. Number III. Its Natural History and Management. The Prairie Farmer 16(26) N.S.: 464.

TUPPER, E.S. (1865g): The Italian bee. Annual Report Iowa State Agricultural Society 11: 322–329.

TUPPER, E.S. (1865h): Notes on Honey and the Honey Bee. The Washington Press (Washington, Iowa) (15th February 1865) 9(34): 1.

TUPPER, E.S. (1865i): Notes on Honey and the Honey Bee. Number 2. The Washington Press (Washington, Iowa) (1st March 1865) 9(36): 1.

TUPPER, E.S. (1865j): Notes on Honey and the Honey Bee. Number 3. The Washington Press (Washington, Iowa) (8th March 1865) 9(37): 1.

TUPPER, E.S. (1865k): Notes on Honey and the Honey Bee. Number 4. The Washington Press (Washington, Iowa) (15th March 1865) 9(38): 2.

TUPPER, E.S. (1865l): Notes on Honey and the Honey Bee. Number 6. The Washington Press (Washington, Iowa) (5th April 1865) 9(41): 1.

TUPPER, E.S. (1865m): Notes on Honey and the Honey Bee. Number 7. The Washington Press (Washington, Iowa) (12th April 1865) 9(42): 3.

TUPPER, E.S. (1865n): Notes on Honey and the Honey Bee. Number 8. The Washington Press (Washington, Iowa) (10th May 1865) 9(46): 1.

TUPPER, E.S. (1865o): Notes on Honey and the Honey Bee. Number 9. The Washington Press (Washington, Iowa) (24th May 1865) 9(48): 2.

TUPPER, E.S. (1865p): Notes on Honey and the Honey Bee. Number 10. The Washington Press (Washington, Iowa) (21st June 1865) 9(52): 1.

TUPPER, E.S. (1865q): Notes on Honey and the Honey Bee. Number 11. The Washington Press (Washington, Iowa) (27th September 1865) 10(13): 1.

TUPPER, E.S. (1865r): Notes on Honey and the Honey Bee. Number 12. The Washington Press (Washington, Iowa) (29th November 1865) 10(22): 1.

TUPPER, E.S. (1865s): Bee Keeping – No. 6. Burlington Hawk-Eye (Burlington, Iowa) (11th November 1865): 6.

TUPPER, E.S. (1866a): Bee Keeping, pp. 458–475. In: NEWTON, I. (ed.): Report of the Commissioner of Agriculture for the Year 1865. Government Printing Office, Washington.

TUPPER, E.S. (1866b): Chapters on the honey bee. - . No. 25. Wintering Bees. The Prairie Farmer 16(22) N.S. : 349.

TUPPER, E.S. (1866c): Query Answered. Why Italians Degenerate. The Prairie Farmer 17(17) N.S.: 288.

TUPPER, E.S. (1866d): Chapters on the honey bee. No. X. Spring Management. The Prairie Farmer 17(17) N.S.: 288.

TUPPER, E.S. (1866e): Increasing Stocks. The Prairie Farmer 17(18) N.S.: 304.

TUPPER, E.S. (1866f): Chapters on the honey bee. Number IV. Its Natural History and Management. The Prairie Farmer 17(1) N.S.: 11.

TUPPER, E.S. (1866g): Answer to a Correspondent. The Prairie Farmer 17(4) N.S.: 52.

TUPPER, E.S. (1866h): Chapters on the honey bee. Number V. Its Natural History and Management. The Prairie Farmer 17(5) N.S.: 68.

TUPPER, E.S. (1866i): Chapters on the honey bee. Number VI. The Prairie Farmer 17(7) N.S.: 100.

TUPPER, E.S. (1866j): Chapters on the honey bee. Number VII. The Prairie Farmer 17(9) N.S.: 132.

TUPPER, E.S. (1866k): Chapters on the honey bee. Number VIII. The Prairie Farmer 17(11) N.S.: 168.

TUPPER, E.S. (1866l): Chapters on the honey bee. Number IX. The Prairie Farmer 17(15) N.S.: 252.

TUPPER, E.S. (1866m): Chapters on the honey bee. Number XI. The Prairie Farmer 17(19) N.S.: 321.

TUPPER, E.S. (1866n): Chapters on the honey bee. Number XII. The Prairie Farmer 17(20) N.S.: 340.

TUPPER, E.S. (1866o): Chapters on the honey bee. Number XIII. The Prairie Farmer 17(22) N.S.: 372.

TUPPER, E.S. (1866p): Chapters on the honey bee. Number XIV. The Prairie Farmer 17(24) N.S.: 412.

TUPPER, E.S. (1866q): Chapters on the honey bee. No. XI. [sic]. The Prairie Farmer 18(3) N.S.: 40.

TUPPER, E.S. (1866r): Chapters on the honey bee. No. XVI. The Prairie Farmer 18(7) N.S.: 107.

TUPPER, E.S. (1866s): Answers to Correspondents. The Prairie Farmer 18(8) N.S.: 121.

TUPPER, E.S. (1866t): Chapters on the honey bee. Number XXII. The Prairie Farmer 18(12) N.S.: 185.

TUPPER, E.S. (1866u): Chapters on the honey bee. No. 23. The Prairie Farmer 18(15) N.S.: 237.

TUPPER, E.S. (1866v): Chapters on the honey bee. No. 24. The Prairie Farmer 18(18) N.S.: 285.

TUPPER, E.S. (1866w): Facts Respecting the Honey Bee. Daily Burlington Hawk-Eye (Burlington, Iowa) (26th October 1866): 2.

TUPPER, E.S. (1866x): Wintering Bees. Daily Burlington Hawk-Eye (Burlington, Iowa) (22nd November 1866): 2.

TUPPER, E.S. (1867a): Why I became a bee-keeper. Letter I. The Prairie Farmer 9(7): 100–101.

TUPPER, E.S. (1867b): Bee Department. The Rural Gentleman: A Monthly Journal. Agriculture – The support of the country 2(2): 219.

TUPPER, E.S. (1867c): Do we know all about bees? The Prairie Farmer, 20 (19) N.S.: 293.

TUPPER, E.S. (1867d): Purity of Italian Queens. The American Bee Journal 3(2): 34–35.

TUPPER, E.S. (1867e): Poor Districts, or poor management. The American Bee Journal and Gazette 2(11): 207-208.

TUPPER, E.S. (1867f): Another instance of two queens in one hive. The American Bee Journal and Gazette 2(12): 227.

TUPPER, E.S. (1867g): Honey Resources. Vermont Farmer (Brandon, Vermont) (1st June 1867) 2(22) [combined Papers Vol. VI.]: 85. [Reprint from the Iowa Homestead].

TUPPER, E.S. (1867h): Why I became a bee-keeper. Letter IV. The Prairie Farmer 19(14): 221.

TUPPER, E.S. (1867i): Why I became a bee-keeper. Letter II. The Prairie Farmer 19(9) N.S.: 132.

TUPPER, E.S. (1867j): Why I became a bee-keeper. Letter III. The Prairie Farmer 19(13) N.S.: 201.

TUPPER, E.S. (1867k): Answers to Correspondents. The Prairie Farmer 20 N.S.: 5.

TUPPER, E.S. (1867l): Answers to Correspondents. The Prairie Farmer 20 N.S.: 68.

TUPPER, E.S. (1867m): Answers to Correspondents. The Prairie Farmer 20 N.S.: 101.

TUPPER, E.S. (1867n): Answers to Correspondents. The Prairie Farmer 20 N.S.: 196.

TUPPER, E.S. (1867o): Answers to Correspondents. *The Prairie Farmer* 20 N.S.: 309.

TUPPER, E.S. (1867p): Answers to Correspondents. *The Prairie Farmer* 20 N.S.: 341.

TUPPER, E.S. (1867q): Answers to Correspondents. *The Prairie Farmer* 20 N.S.: 359.

TUPPER, E.S. (1867r): Answers to Correspondents. *The Prairie Farmer* 20 N.S.: 389.

TUPPER, E.S. (1867s): The Honey Season-Management. *The Prairie Farmer* 20 N.S.: 37.

TUPPER, E.S. (1867t): Bee-Keeping in the West. *The Hillsdale Standard* (Hillsdale, Michigan) (5th February 1867): 2. [Reprint from the Iowa Homestead].

TUPPER, E.S. (1867u): Storing of Surplus Honey. *The Daily Ohio Statesman* (Columbus, Ohio) (10th August 1867): 34(346): 4. Reprint from the Iowa Homestead].

TUPPER, E.S. (1867v): Wintering Bees. *The Vermont Journal* (Windsor, Vermont) (12th January 1867) 24(2): 4. [Reprint from the Iowa Homestead].

TUPPER, E.S. (1867w): Moth-Proof Hives. *The Tennessee Baptist* (Memphis, Tennessee) (7th November 1867) 2(18): 6.

TUPPER, E.S. (1867x): A Little More About Bees. *Burlington Daily Hawk-Eye* (Burlington, Iowa) (10th April 1867): 2.

TUPPER, E.S. (1868a): Bee Department. *The Rural Gentleman: A Monthly Journal, devoted to Horticulture, Agriculture, and Rural Economy*. 2(12): 391–392.

TUPPER, E.S. (1868b): Garden flowers for bees. *The Prairie Farmer* (25th January): 58.

TUPPER, E.S. (1868c): Questions answered. Feeding Light Swarms. *The Prairie Farmer* 21 N.S. (12): 184.

TUPPER, E.S. (1868d): Bee-Keeping. *North Western Farmer. A Magazine of Rural Life*, December 1868, p. 268–269.

TUPPER, E.S. (1868e): Winter bee-keeping, pp. 209–211. In: STOKES, J.W. & CAPRON, H. (eds.): *Report of the Commissioner of Agriculture for the year 1867*. Government Printing Office, Washington.

TUPPER, E.S. (1868f): Early Killing of Drones – The Honey Season. *The Western Rural* 6(28): 227. [Reprint from the Iowa Homestead].

TUPPER, E.S. (1868g): Early Planting. *Daily Burlington Hawk-Eye* (Burlington, Iowa) (22nd May 1868): 2. [note author announcement ahead of the article].

TUPPER, E.S. (1868h): Cultivate Flowers. *Daily Burlington Hawk-Eye* (Burlington, Iowa) (22nd May 1868): 2. [note author announcement ahead of the article].

TUPPER, E.S. (1869a): Profits of Bee-Keeping. *Hearth and Home* 1(42): 658–659.

TUPPER, E.S. (1869b): Care of Bees in Summer. *Hearth and Home* 1(32): 498.

TUPPER, E.S. (1869c): Artificial Bee-Swarming. *Hearth and Home* 1(24): 370–371.

TUPPER, E.S. (1869d): Bee Culture. *Hearth and Home* 1(23): 354–355.

TUPPER, E.S. (1869e): Bee Pasturage. *Hearth and Home* 1(17): 258.

TUPPER, E.S. (1869f): How to Begin to Keep Bees. *Hearth and Home* 1(12): 181–182.

TUPPER, E.S. (1869g): The Apiary in June. *The Bee-Keepers' Journal and Agricultural Repository* 1(6): 41.

TUPPER, E.S. (1869h): Answers to correspondents. *Bee Keepers' Journal and Agricultural Repository* 1(6): 42.

TUPPER, E.S. (1869i): A German Correspondent. *Bee Keepers' Journal and Agricultural Repository* 1(6): 42. [Translated by Mrs. E.S. Tupper].

TUPPER, L.C. (1869j): Fragments of the Journal of a Bee-Keeper. *Bee Keepers' Journal and Agricultural Repository* 1(6): 43. [Translated from the French by Lydia C. Tupper].

TUPPER, E.S. (1869k): How to prevent second and third swarms. *Bee Keepers' Journal and Agricultural Repository* 1(6): 44.

TUPPER, E.S. (1869l): Died. *Bee Keepers' Journal and Agricultural Repository* 1(6): 46.

TUPPER, E.S. (1869m): The Apiary, Care of Bees in July. *Bee Keepers' Journal and Agricultural Repository* 1(7): 49.

TUPPER, E.S. (1869n): Answer to correspondents. *Bee Keepers' Journal and Agricultural Repository* 1(7): 51.

TUPPER, E.S. (1869o): Queen Rearing. *Bee Keepers' Journal and Agricultural Repository* 1(7): 52.

TUPPER, E.S. (1869p): Roses. *Bee Keepers' Journal and Agricultural Repository* 1(7): 54.

TUPPER, E.S. (1869q): Amusement for Children. *Bee-Keepers' Journal and Agricultural Repository* 1(7): 54.

TUPPER, E.S. (1869r): Bee-Keeping in September. *Bee-Keepers' Journal and National Agriculturist* 10(9): 65.

TUPPER, E.S. (1869s): Correspondence - A New Method of Hiving Bees. Purity of Italian Bees, etc. *Bee-Keepers' Journal and National Agriculturist* 10(9): 66.

TUPPER, E.S. (1869t): Book Notices. *Bee-Keepers' Journal and National Agriculturist* 10(9): 68.

TUPPER, E.S. (1869u): The Flower Garden. *Bee-Keepers' Journal and National Agriculturist* 10(9): 70.

TUPPER, E.S. (1869v): The Honey Season. Reports from Different States. *Bee-Keepers' Journal and National Agriculturist* 10(11): 82.

TUPPER, E.S. (1869w): Two Queens in One Hive. *Bee-Keepers' Journal and National Agriculturist* 10(11): 84.

TUPPER, E.S. (1869x): Correspondence. *Bee-Keepers' Journal and National Agriculturist* 10(11): 86.

TUPPER, E.S. (1869y): Home. Bee-Keepers' Journal and National Agriculturist 10(11): 87.

TUPPER, E.S. (1869z): M. Quinby. Biographical Sketch. Bee-Keepers' Journal and National Agriculturist 10(12): 89.

TUPPER, E.S. (1869aa): France and Germany. Bee-Keepers' Journal and National Agriculturist 10(12): 89.

TUPPER, E.S. (1869ab): Answers to Correspondence. Bee-Keepers' Journal and National Agriculturist 10(12): 92.

TUPPER, E.S. (1869ac): The Family Circle. Bee-Keepers' Journal and National Agriculturist 10(12): 94.

TUPPER, E.S. (1869ad): The present bee season. Colman's Rural World 23(7): 101.

TUPPER, E.S. (1869ae): Fall and Winter Management of Bees. Hearth & Home 1(48): 755. TUPPER, E.S. et al. (1870) Iowa Bee-Keepers' Association. Bee-Keepers' Journal and National Agriculturist 11(12): 92.

TUPPER, E.S. (1870a): Women as bee keepers. The Annals of Bee Culture for 1870: 26–27.

TUPPER, E.S. (1870b): The bee moth. The Annals of Bee Culture for 1870: 28–29.

TUPPER, E.S. (1870c): Fall and Winter Management of Bees. The Illustrated Bee Journal 2:51–55. [Reprint from "Hearth and Home"].

TUPPER, E.S. (1870d) A Word in Season about bee-hives. Hearth and Home 2(3): 34.

TUPPER, E.S. (1870e): Mr. Elisha Gallup. Bee-Keepers' Journal and National Agriculturist 11(8): 57.

TUPPER, E.S. (1870f): Irascible Bees. Bee-Keepers' Journal and National Agriculturist 11(8): 59.

TUPPER, E.S. (1870g): Answers to Correspondents. Bee-Keepers' Journal and National Agriculturist 11(2): 11.

TUPPER, E.S. (1870h): Housework -- Education. Bee-Keepers' Journal and National Agriculturist 11(2): 14.

TUPPER, E.S. (1870i): Youth the Spring-Time of Life. Bee-Keepers' Journal and National Agriculturist 11(2): 16.

TUPPER, E.S. (1870j): Correspondence. Bee-Keepers' Journal and National Agriculturist 11(7): 51.

TUPPER, E.S. (1870k): A Valuable Cultivator. Bee-Keepers' Journal and National Agriculturist 11(7): 52.

TUPPER, E.S. (1870l): Ladies Farming. Bee-Keepers' Journal and National Agriculturist 11(7): 54.

TUPPER, E.S. (1870m): Increase of Stocks. Bee-Keepers' Journal and National Agriculturist 11(6): 43.

TUPPER, E.S. (1870n): Correspondence. Bee-Keepers' Journal and National Agriculturist 11(6): 43.

TUPPER, E.S. (1870o): Our Grandmothers. Bee-Keepers' Journal and National Agriculturist 11(6): 47.

TUPPER, E.S. (1870p): Roses. Bee-Keepers' Journal and National Agriculturist 11(6): 47.

TUPPER, E.S. (1870q): Correspondence and Answers. Bee-Keepers' Journal and National Agriculturist 11(3): 19.

TUPPER, E.S. (1870r): Flowers. Bee-Keepers' Journal and National Agriculturist 11(3): 20.

TUPPER, E.S. (1870s): Education of Girls. Bee-Keepers' Journal and National Agriculturist 11(12): 95.

TUPPER, E.S. (1870t): Shall we Winter Bees out of Doors? The Bee-Keepers' Journal and National Agriculturist 11(12): 90.

TUPPER, E.S. (1870u): Health of Children. The New England Homestead 3(4): 31.

TUPPER, E.S. (1870v): Patent Rights. The Western Rural 8(3): 27.

TUPPER, E.S. (1871a): Iowa Bee-Keepers' Association. Bee-Keepers' Journal and National Agriculturist 12(12): 93.

TUPPER, E.S. (1871b): Apiary for May. Bee-Keepers' Journal and National Agriculturist 12(5): 35.

TUPPER, E.S. (1871c): Strong Stocks. Bee-Keepers' Journal and National Agriculturist 12(4): 26.

TUPPER, E.S. (1871d): Winter Evenings. Bee-Keepers' Journal and National Agriculturist 12(1): 6.

TUPPER, E.S. (1871e): A report". Annual Report Iowa State Agricultural Society 17:479-499.

TUPPER, E.S. (1872a): Fertilizing queens in confinement. The Annals of Bee Culture for 1872: 7-8.

TUPPER, E.S. (1872b): Does a queen sting her royal rival? The Annals of Bee Culture for 1872: 34-35.

TUPPER, E.S. (1872c): Theory versus Practice. Bee-Keepers' Journal and National Agriculturist 13(7): 49.

TUPPER, E.S. (1872d): Fall Feeding. Bee-Keepers' Journal and National Agriculturist 13(11): 81.

TUPPER, E.S. (1872e): In September. Bee-Keepers' Journal and National Agriculturist 13(9): 66.

TUPPER, E.S. (1872f): Removal. Bee-Keepers' Journal and National Agriculturist 13(1): 4.

TUPPER, E.S. (1873a): Bee-Keeping - (Prize Essay). The Bee-Keeper's Magazine 1(1): 3-20.

TUPPER, E.S. (1873b): Bee-Keeping for Ladies. The Bee-Keeper's Magazine 1(1): 43-44.

TUPPER, E.S. (1873c): Apiary for March. The Bee-Keeper's Magazine 1(4): 102-103.

TUPPER, E.S. (1873d): Using the extractor on brood comb. *The Bee-Keeper's Magazine* 1(4): 103.

TUPPER, E.S. (1873e): Spring work in the Apiary. *The Bee-Keeper's Magazine* 1(4): 109–110.

TUPPER, E.S. (1873f): Apiary for April. *The Bee-Keeper's Magazine* 1(5): 128.

TUPPER, E.S. (1873g): Apiary for May. *The Bee-Keeper's Magazine* 1(6): 154–155.

TUPPER, E.S. (1873h): Apiary for July. *The Bee-Keeper's Magazine* 1(8): 211.

TUPPER, E.S. (1873i): Apiary for September. *The Bee-Keeper's Magazine* 1(10): 258.

TUPPER, E.S. (1873j): Apiary for October. *The Bee-Keeper's Magazine* 1(11): 283–284.

TUPPER, E.S. (1873k): Apiary for November. *The Bee-Keeper's Magazine* 1(12): 307–308.

TUPPER, E.S. (1873l): Apiary for December. *The Bee-Keeper's Magazine* 1(13): 330–331.

TUPPER, E.S. (1873m): Apiary for February. *National Agriculturist and Bee Journal* 14(2): 15.

TUPPER, E.S. (1873n): Business Notice. *National Agriculturist and Bee Journal* 14(2): 14.

TUPPER, E.S. (1873o): Wintering Bees. *The National Bee Journal and Magazine* 4(8): 242–243.

TUPPER, E.S. (1875a): Time for dividing and preparing for Winter. *The Bee-Keepers' Magazine* 3(8): 168–170.

TUPPER, E.S. (1875b): Centennial Exposition. *The American Bee Journal* 11(5):98.

TUPPER, E.S. (1875b): The Centennial. *The American Bee Journal* 11(10): 215.

TUPPER, E.S. (1876a): Are we to give up the use of the extractor? *The Bee-Keepers' Magazine* 4: 16.

TUPPER, E.S. (1876b): Important to Lady Bee-Keepers. *Bee-Keeper's Magazine* 4(2): 40.

TUPPER, E.S. (1876c): The Centennial. *The Bee-Keepers' Magazine* 4(3): 62–63.

TUPPER, E.S. (1876d): Bee Keeping. Prize Essay. *British Bee Journal, and Bee-Keeper's Adviser* 3(34): 186–189.

TUPPER, E.S. (1876e): Bee Keeping. Prize Essay. *British Bee Journal, and Bee-Keeper's Adviser* 3(35): 204–206.

TUPPER, E.S. (1877): Notes for December. *The Bee-Keepers' Magazine* 5: 307–308.

TUPPER, E.S. (1876f): The Apiary in January. *The Western Rural* 14(3): 23.

TUPPER, E.S. (1877a): Bee-Keeping. Prize Essay. *British Bee Journal* 5(55): 127–129.

TUPPER, E.S. (1877b): Bee-Keeping. Prize Essay. *British Bee Journal* 5(56): 142–144.

TUPPER, E.S. (1878a): First lessons in Bee-Keeping, No. 3. *The Bee-Keepers' Magazine* 6(4): 80.

TUPPER, E.S. (1878b): April Management. *The Bee-Keepers' Magazine* 6(4): 84.

TUPPER, E.S. (1878c): First lessons in Bee-Keeping, No. 4. *The Bee-Keepers' Magazine* 6(5): 100–101.

TUPPER, E.S. (1878d): May Management. *The Bee-Keepers' Magazine* 6(5): 108–109.

TUPPER, E.S. (1878e): First lessons in Bee-Keeping, No. 5. *The Bee-Keepers' Magazine* 6(6): 125–126.

TUPPER, E.S. (1878f): June Management. *The Bee-Keepers' Magazine* 6(6): 130–131.

TUPPER, E.S. (1878g): July Management. *The Bee-Keepers' Magazine* 6(7): 149.

TUPPER, E.S. (1878h): Hints for Beginners. *The Bee-Keepers' Magazine* 6(9): 187.

TUPPER, E.S. (1878i): September Management. *The Bee-Keepers' Magazine* 6(9): 196.

TUPPER, E.S. (1878j): First Lessons. *The Bee-Keepers' Magazine* 6(11): 240–241.

TUPPER, E.S. (1878k): First lessons in Bee-Keeping. *The Bee-Keepers' Magazine* 6(2): 34.

TUPPER, E.S. (1878l): February Management. *The Bee-Keepers' Magazine* 6(2): 41–42.

TUPPER, E.S. (1878m): First lessons in Bee-Keeping, No. 2. *The Bee-Keepers' Magazine* 6(3): 57–58.

TUPPER, E.S. (1878n): Fertilization in Confinement. *The Bee-Keepers' Magazine* 6(3): 9.

TUPPER, E.S. (1878o): Bee-Keeping. Prize Essay by Mrs. E.S. Tupper. *British Bee Journal* 6(57): 171–172.

TUPPER, E.S. (1879a): Items of importance. *The Bee-Keepers' Magazine* 7(1): 5–6.

TUPPER, E.S. (1879b): The March of Improvement. *The Bee-Keepers' Magazine* 7(1): 7.

TUPPER, E.S. (1879c): Honey Lemon Cakes / Honey Fruit Cake / Honey Ginger Snaps. *The Bee-Keepers' Magazine* 7(5): 87.

TUPPER, E.S. (1882a): How to obtain a home in Dakota almost Gratis. *The Bee-Keepers' Magazine* 10(11): 229–231.

TUPPER, E.S. (1882b): How to Begin the New Year. 10(12): 247–248

TUPPER, E.S. (1883a): Bee-Keeping for Women. By Rebecca Harding Davis. Selected from “The Companion” with comments by Mrs. E.S. Tupper. *The Bee and Poultry Magazine* 11(1): 9–11.

TUPPER, E.S. (1883b): Instructions for Beginners in Bee-keeping. *The Bee and Poultry Magazine* 11(3): 68–70.

TUPPER, E.S. (1883c): Who may Profitably come to Dakota. *The Bee and Poultry Magazine* 11(3): 62–64.

TUPPER, E.S. (1883d): Instructions or Beginners in Bee-keeping. *The Bee and Poultry Magazine* 11(4): 112–113.

TUPPER, E.S. (1883e): Instructions for Beginners in Bee-keeping. *The Bee and Poultry Magazine* 11(5): 125–126.

TUPPER, E.S. (1883f): Instructions for Beginners in Bee-keeping. *The Bee and Poultry Magazine* 11(6): 152–153.

- TUPPER, E.S. (1883g): Bee Hives. *The Bee and Poultry Magazine* 11(6): 161.
- TUPPER, E.S. (1883h): Dakota. *The Bee and Poultry Magazine* 11(6): 148.
- TUPPER, E.S. (1883i): Instructions for Beginners in Bee-Keeping. Number 5. *The Bee and Poultry Magazine* 11(8): 210–212.
- TUPPER, E.S. (1883j): Instructions for Beginners in Bee-Keeping. Number 6. *The Bee and Poultry Magazine* 11(8): 232.
- TUPPER, E.S. (1883k): Instructions for Beginners in Bee-Keeping. Number 7. *The Bee and Poultry Magazine* 11(12): 307.
- TUPPER, E.S. (1884): From Mrs. E.S. Tupper. *The Bee-Keepers' Magazine* 12(6): 138–139.
- TUPPER, E.S. & SAVERY, A. (1872): Iowa Italian Bee Company. *The National Bee Journal* 3(2): 64.
- TUPPER, H. (1904): A Pioneer Experience. *Sioux City Journal* (Sioux City, Iowa) (31st January 1904), p. 5.
- TUPPER, E. (1972): Tupper genealogy, 1578–1971. The Reporter Press, Paul K. Blanchard, North Conway N.H..
- TWAIN, M. (1862): Letter from Mark Twain to William H. Claggett (Carson City, Nevada), 28th February 1862. <https://www.marktwainproject.org/>
- VARRO, F. (1867) Purity of Italian Bees, and other Matters. *The American Bee Journal* 3(1): 19–20.
- VINTEN-JOHANSEN, P., BRODY, H., PANETH, N., RACHMAN, S., RIP, M. & ZUCK, D. (2003): Cholera, Chloroform, and the Science of Medicine: A Life of John Snow. Oxford University Press, Oxford.
- VOGEL, F.W. (1870): I. Johann Dzierzon, Pfarrer zu Carlsmarkt, p. 9–14. In: *Jahrbuch der Bienen-Zucht, zugleich Bienenkalender und Notizbuch auf das Jahr 1870*.
- WAITE, L.C. (1870a): Mrs. Tupper's plan for securing the fertilization of young queens by any drones desired. *The Illustrated Bee Journal* 1(12): 601-602.
- WAITE, L.C. (1870b): Contemptible. *The Illustrated Bee Journal* 1: 603-604.
- WAITE, L.C. (1871): The Fertilization of the Queen Bee in Confinement by Any Drones Desired, p. 45-49. In: *Report of Twelfth Annual Meeting of the State Horticultural Society of Mo., as published in the: Sixth Annual Report of the State Board of Agriculture with an Abstract of the Proceedings of the County Agricultural Societies for the Year 1870*. Horace Wilcox, Public Printer, Jefferson City, Mo.
- WARD, G.C. et al. (1999) *Not For Ourselves Alone. The Story of Elizabeth Cady Stanton and Susan B. Anthony. An Illustrated History*. Alfred A. Knopf, New York.
- WARNER, D.J. (2011): *Sweet Stuff. An American History of Sweeteners from Sugar to Sucralose*. Smithsonian Institution Scholarly Press, Washington D.C.
- WASHBURN, I. (1874): Notes, historical, descriptive, and personal, of Livermore, in Androscoggin (formerly in Oxford) County, Maine. Published by Bailey & Noyes, Portland.
- WASHBURN, I. (1881): *The north-eastern boundary*. Private Print.

- WATSON, L.R. (1928): Controlled Mating in Honeybees. *The Quarterly Review in Biology* 3(3): 377–390.
- WHEATON, H. (1831): *History of the Northmen, or Danes and Normans, from the Earliest Times to the Conquest of England by William of Normandy*. J. Murray, London.
- WHEATON, H. (1836): *Elements of International Law: With a Sketch of the History of the Science*. Carey, Lea & Blanchard, Philadelphia.
- WHIDDEN, M.F. (1846): *My Baby. Mother's Assistant and Young Lady's Friend* (July, 1846, to January, 1847): 97.
- WHIDDEN, F.C. (1968): The story of some descendants of Rendol and Sarah Whidden of Calais, Maine: also genealogical notes from the first generation to land in America, on both the male and female lines, where available.
- WIED, M. zu (1839): *Reise in das Innere Nord-America in den Jahren 1832 bis 1834. Erster Band*. J. Hoelscher, Coblenz.
- WIGGIN, K.D.S. (1923): *My garden of memory: An autobiography*. The Riverside Press Cambridge, Houghton Mifflin Company, Boston and New York.
- WILDER, M.P. (1875): Address delivered at the Fifteenth Session of the American Pomological Society, held in Chicago, Illinois, Sept, 8, 9, 10, 1875. Published by the Society.
- WILLARD, F.E. & LIVERMORE, M.A. (eds.) (1893): *A Woman of the Century. Fourteen Hundred-Seventy Biographical Sketches accompanied by portraits of leading American women in all walks of life*. Charles Wells Moulton, Buffalo Chicago New York.
- WILLARD, F.E. & LIVERMORE, M.A. [Eds.] (1897): *American Women. Fifteen Hundred Biographies with over 1400 Portraits. Volume 2. Revised edition*. Mast, Crowell & Kirkpatrick, New York – Chicago – Springfield (Ohio).
- WILLIAMS, C. (1885): *Biographical Encyclopaedia of Maine of the Nineteenth Century*. Metropolitan Publishing and Engraving Company, Boston.
- WILSON, E.M. (1918): Bee-Keeping for Women. *The American Bee Journal* 58(1): 22–23.
- WILSON, J.G. & FISKE, J. [Eds.] (1889): *Appleton's Cyclopaedia of American Biography*, Vol. 6, D. Appleton and Company, New York.
- WITZGALL, J. (1884): Dr. Johann Dzierzon (Biographie), pp. 66–70. *Bayrischer Bienenkalender für das Jahr 1884. I. Jahrgang*. Druck und Verlag der Schneider'schen Buchdruckerei, Rothenburg o. T..
- WITZGALL, J. & FELGENTREU, M. (1889): Biographien hervorragender Bienenzüchter. 1. Dr. Johann Dzierzon, pp. 466–469. In: *Illustriertes Handbuch der Bienenzucht. Ein ausführliches Lehrbuch für Imker und solche, die es werden wollen*. Verlag von Eugen Ulmer, Stuttgart.
- WOODS, K.P. (1907): *The True Story of Captain John Smith*. Doubleday, Page & Company, New York.
- WOODWORTH, J.B. (1897): Charles Thomas Jackson. *The American Geologist* 20(2): 69–110.
- WOLFE, R.J. & PATTERSON, R.W. (2007): Charles Thomas Jackson, "the Head Behind the Hands": Applying Science to Implement Discovery and Invention in Early Nineteenth Century America. Historyofscience.com, Novato, California.

YIN, Z. (2017): Heavenly Principles? The Translation of International Law in 19th-century China and the Constitution of Universality. *The European Journal of International Law* 27(4): 1005–1023.

ZIRKLE, C. (1951): Gregor Mendel & His Precursors. *Isis* 42(2): 97–104.

Dr. sc. ETH Michael Mielewczik

Current Address:

Rothamsted Research

West Common

Harpenden AL5 5JQ, United Kingdom

michael.mielewczik@rothamsted.ac.uk

Dr. Janine Moll

Current Address:

Scharnachtalstrasse 12

3006 Bern, Switzerland

mollj@bluewin.ch

Kelly Jowett

Rothamsted Research

West Common

Harpenden AL5 5JQ, United Kingdom

Appendix 1: Letter of ELLEN S. TUPPER to an unnamed uncle

The following text is an extract from a private letter ELLEN S. TUPPER had written and sent to an unnamed uncle. The recipient probably was her uncle REV. FRANCIS SMITH (born 1812), who was a pastor in Rhode Island and brother of her father. The letter was published under the

previously unknown pen-name ELLEN. It was published in August 1855 in the Baptist magazine the "Home Mission Record" (TUPPER 1855):

"Brighton, March 18, 1855

Dear Uncle, -- We have now been more than two years in Iowa, and nearly two in Brighton, quite long enough to make up our minds whether we are suited or not in our new home, and it is pleasant to find that all our hopes and expectations from the change are being realized, and that we are in no respect disappointed in regard to our location and its advantages. I suppose the very great improvement in my health would reconcile me to many discomforts, if such there had been; but in reality, these have been much fewer than one would expect to find in a new country -- far less than I had anticipated.

I dare say your young people would call it a decided trial to live as we have this Winter in one room -- that serving as bed-room, kitchen and parlor formerly; and now that they have emptied some 250 bushels of wheat, for safe keeping, into my store-room, the kitchen serves for pantry likewise. But the room is large and pleasant, and there is an addition already framed always in my sight, reminding me of the better days coming; and as things are excellent, in comparison, I can very easily esteem my home very comfortable, compared with the log-huts of many settlers through the country. There is a prospect now of our main house being boarded in soon, as the lumber is in readiness, and the frames for doors and windows made, stone quarried for the cellar, and so on. Every step of the progress in building I can trace, since all but the putting together devolves upon Allen, who has hauled logs to mill; quarried stone, and got it to the spot; and now is preparing a log heap to burn lime. Building is a tedious, labourious work here; but I think we shall enjoy our house all the more from the personal interest taken in it.

We think our Winters here delightful - no rain or storm, or even wind, but dry, clear, sunny cold, with not quite snow enough for purposes of transportation. Allen has found no days this Winter or last when he could not work out of doors with comfort -- Indeed it is the season of all others here for accomplishing labor. We have noticed often, with much sympathy, the accounts of suffering in your and other cities, and have often wished we could send relief from our wheat and corn, and meat.

We have no poor here -- nobody that needs help. Labor is so scarce and high that all new-comers find work here with ready pay, and a case of suffering is almost unknown. I have never seen one. For ourselves, we are enjoying a luxury before unknown, in the feeling that we are living almost entirely on the produce of our own farm -- eating our own flour, (superfine, too) our own meat and meal, raising our own poultry, and cooking our own eggs -- using cream and milk without stint, and making our own butter -- enjoying sausages and ham of our own curing. These things make us feel very independent. Indeed Allen is beginning to think that wheat, parched and grounded like coffee, is superior to the best Mocha (especially as the latter makes his head ache).

We notice your remark that 400 acres of land can hardly be used to advantage for farming purposes, and agree with you. But Allen, it seems, did not make it plain that only about 40 acres of this is broken and under cultivation, with 40 more acres under fence. So much he, doubtless can, unassisted, farm to good advantage, though he hopes to seed part of this down, and if he can get help, break new land. His land was bought as a good investment of money, and has proved such, as all of it would sell now for double that he gave for it. The land adjoining what he is cultivating is invaluable, as affording good range for his cattle near home, from which they cannot be shut out;

and, also, every improvement made on his farm enhances the value of that, if he wishes to sell it. His timber was bought very low, and the 160 acres there are always saleable, and must always be, as timber is very scarce, and this is three-fourth of a mile from a saw-mill, and is of the finest quality of black walnut, oak and hickory. Any man used to lumbering operations would make money fast enough by getting lumber to market from this tract, as lumber is very high, and always in cash demand.

If there was any thing in this far off land which I thought would interest you besides, I should be glad to write of it. Our town has made great improvement since we came here, in regard to morals, temperance, and an interest in education. We see it with joy. As yet there seems no new interest in religious things, though the people generally attend church constantly, and respect religion. There are too many sects, and too little union among them, I fear, to call down a blessing on their effort.

Affectionately, ELLEN."

Appendix 2: The Lecture of ANNIE SAVERY the First Annual Session of the North American Bee Keeper's Society

ANNIE N. SAVERY held a lecture at the convention in Cincinnati in December 1871, which discussed the "*Experiences of a Beginner*" in beekeeping. The address was clearly aimed at the female audience attending the conference, however disorganization had prevented the attendance of a more general audience. Thus ANNIE N. SAVERY switched the topic of her talk and gave a motivations speech to convince the old, experienced beekeepers to encourage their wives and daughters to join in their profession. The talk also gave an account on how the "Iowa Italian Bee Company" was created:

"The Committee, yesterday, solicited me to deliver a ten minutes' address on 'The Experience of a Beginner.' Being entirely unprepared, I begged to be excused ; but they insisted – promising, however, to have a notice published in the papers this morning, inviting the citizens of Cleveland to be present to-night, so that I, a mere beginner, might have an audience outside of old experienced bee-keepers to talk to. This notice to the papers was, by some mistake, neglected, and so I find myself a novice in the unpleasant position of having to speak to an audience who know more about bee-keeping than I ever dreamed of; and hence, while I shall not expect to teach you anything, I may, perhaps interest you in the recital of the motives which first led me to become a bee-keeper.

'Last fall I was as ignorant of bees and bee-keeping as you can possibly imagine; in fact, I hardly knew a honey bee from a Yellow Jacket. A gentleman in the southern part of Iowa handed my husband Mr. King's Text-Book on Bee-Keeping, saying: 'There, take that home to your wife; she is a progressive woman, and I think will find something in that which will interest her.' I read it, particularly noticing that paragraph which gave an account of the profits. I saw at once that there was an opening for the employment of women – a new channel of usefulness, by means of which woman could be lifted out of the life of drudgery, or monotonous indoor employments, which are ruining the physical – to say nothing of the mental – health of so many of our girls and women. Deeply interested as I am and have been in enlarging the sphere for woman's usefulness, I was at once induced to investigate the new business. I thought I saw in it an employment that would be pleasant and profitable, not only for the poor, but for the rich ; for need I tell you that there is as great a necessity for all women to have employment as there is for all men ? They, like men, must have some object in life, outside of themselves, for which to labor—some labor that will tax their

intellects and force them, by the demands it makes upon them, to grow, mentally and physically, just as men do.

'As society is now organized, there is nothing for girls outside of marriage, and for this the majority of them are totally unfitted. They are not taught to have high aims in life; they are without individuality; there is nothing to incite them to be anything, unless it be to try and be pretty – to seek to please the eyes, rather than the minds and hearts of men.

The old channels, such as school teaching, &c., are crowded. This, I thought, is a new channel, in which I will try to direct women. To do so I concluded to set the example and show them, by my experience, that there is something in which they may succeed equally with men, and for which they will get equal pay.

'I went to Mr. Wilson, the Editor of the Iowa Homestead, to get the address of Mrs. Tupper, one of the highest authorities on bee-keeping, and at once opened a correspondence with her. Mr. Wilson saw fit to notice my visit to him in his paper, and at the same time, called attention to the fact that I wished to buy some bees. I had mentioned to him that I thought I would buy about a half dozen hives to begin on. Shortly after this I was called to the western part of the State, Mr. Savery being absent at New York at the time. In a few days he returned, and when about to enter his office, was met by a countryman, who accosted him with the startling inquiry: 'Be you the husband of the woman that wants to buy bees?' Mr. Savery could not, of course, give him a satisfactory answer, as I had not told him anything of my plans; so he replied 'I think not.' 'Yes, but I seen [sic] it in the Homestead, and as I had some stands, I come up to sell her some.' This bothered Mr. S., but his perplexity was increased when he went to the post-office and took out a pile of letters near a foot high, all directed to his wife, and on his return, met another farmer that he did not know anything about 'stands', or what new business his wife was going into, but he intended to know ; so he went to the Editor and had it explained. The result was that, on my return, I bought 23 hives of bees, and went to work to learn something about them.

*'It would be uninteresting to you old bee keepers, to state how I proceeded, suffice it to say that I found **that every pleasure had its sting**. I think I now know the meaning of that phrase, 'obtaining knowledge under difficulties.' My new employment soon began to receive letters from them – from poor widows, in particular. Many of them 'was widows' whose husbands had died in the defense of their country, and they were left with children and in penury. I gave them all the information I could, and of course recommend to them bee-keeping.*

'I started with 23 colonies, some of them in box hives. They were very weak ; I did not know enough about it then to know they were weak, but I do now. I have now 37 strong colonies, in movable comb hives, in the cellar, in perfect order, and took 1,200 lbs. of surplus honey, and that, too, without the use of the extractor. Nearly all information I had was from the 'Text-Book.' But I have demonstrated – to myself, at least – that it is an occupation eminently fitted for women – one in which they can succeed. There is no occupation, in which they can engage, that is more appropriate. There is none more beautiful, none more attractive, none more healthful or profitable. Every bee-keeper here should encourage his wife and daughters to engage in it. If in no other way, then push them out in the apiary – yes, push them ! Push them out of being the trifling, tender, pampered, dawdling creatures that ease and fashion would make them. Insist upon it that they shall make something more of themselves, than the worthless nothings they might otherwise become. Induce them to take hold of this business (or some other). Tell your daughters how interesting it is, and engage them in it. They will soon be enthusiastic as yourself, and if it brings no other good, they will at least have some out-door employment, which may, perhaps, keep them from sacrificing themselves to the first man that offers himself, for fear that they may not get another chance -- regardless of whether they are fitted for each other or not. Marriage is too often

a thing of mere convenience ; when it is so, both are apt to become indifferent, selfish and unfaithful. It should not be so. It should be regarded as a sacred bond – a perfect union of kindred souls – and all that is divine to us. It should not only be made for time, but should run on through all eternity. This can not be until woman can appreciate and claim God-given rights; until she learns to use her powers and faculties – in a word, until she becomes self-reliant. Nothing will contribute so much to make her all this, and to develop her into such a woman as every sensible man must admire, as engaging in an employment which will make her his equal.”

(ANONYMOUS 1872g, p. 30–31)

Appendix 3: Letters of ANNIE N. SAVERY to ELLEN S. TUPPER from January and February 1873

The following two letters from ANNIE N. SAVERY to ELLEN S. TUPPER were written and sent in January and February 1873. ANNIE N. SAVERY and her husband J.C. SAVERY at that time were on winter stay in Washington D.C., where they remained until after the celebrations of the second inauguration of ULYSSES S. GRANT as President on the 4th March 1874. Both letters have survived only in the form of two reprints in the “*Bee-Keeper’s Magazine*”, where they were published in the March issue of that year and thus a couple of months after they were received by ELLEN S. TUPPER. However, the letters are only part of the correspondence. The second letter clearly omitted parts both at the beginning and the end of the text and the mentioned letter that was written by ELLEN S. TUPPER was not reprinted at all. From the surviving correspondence it remains unclear if the letters were published with the knowledge of ANNIE N. SAVERY, however the latter date of print seem to possibly indicate that this might have been the case.

Washington, Jan. 27, ‘73

Dear Mrs. Tupper: -- I intended to have written you long ago, but each day has brought something to prevent me. I do not forget our last conversation and the assurances expressed on both sides, of continued friendship. We learned in our intimate relations to know each other, and if words are indications of feeling, we learned in that time to love and respect each other. I regard you as a most able woman, full of tender sympathy for all. Before I left home I frequently heard rumors in regard to our business relations, that were totally untrue and unjust to myself and husband. I mention this, only to show you how anxious our enemies are to breed a rupture between us, I trust they will never succeed.” Let me hear from you soon [sic] Love to all the family. Your friend

ANNIE SAVERY

Washington D.C., Feb. 8, 1873

*My Dear Mrs. Tupper: -- Your very kind and friendly letter was duly received, and I avail myself of the first leisure moment to reply. *** I am indeed very glad to hear that you are getting along so well. Better even than having success, is the knowledge of deserving it, and that you merit it, I, as well as others your friends know. Such indefatigable courage and perseverance as yours must win in time. And you must feel assured that I shall always rejoice in your well doing,”*

As to the Consulship, which I see is being discussed in the Des Moines papers. It happened curiously enough. I was sitting with a party of Senators and their wives, when something was said of course about my suffrage proclivities. In the course of conversation I asked the Senators what they were going to give to women to make good their promise in the national platform ? Many things were talked of, and I said, why do you not send a women abroad as Consuls, they, I think, would be better than men. They asked me if I would go, I consented, and they declared I should

*have it. I wrote the petition, and handed it to my own Senators; the entire delegation signed it and fourteen other states, and it has been presented to the President, the most formidable petition ever presented for an office, and yet I have no idea the President will appoint me, as he has a fearful shrinking from establishing precedents. I submit to the ordeal only to open the door for other women, and the President fears the avalanche, but we will see what comes of it ! He has not said no. * * * Shall be glad to hear from you any time.*

Your friend

ANNIE SAVERY

Appendix 4: The instructions of the judge to the jury in the TUPPER case:

The trial of ELLEN S. TUPPER was noteworthy enough that the newspaper, highly uncommon for its time, published a large excerpt of the instructions the judge had given to the jury in regard of reasonable doubt and the question of insanity. As the document gives both interesting insights in the perception of the topic at the time, but also discusses the possible influence of ELLEN S. TUPPER's business and work as an editor on her state of mind, the surviving parts of the instructions are here repeated in full:

"V. The next and most important question for you to determine is what was the mental condition of the defendant at the time and in doing the acts – if such acts she did – as charged in the indictment. The defendant has introduced testimony with the view of establishing or tending to establish her insanity at or about the time of the commission of the acts charged as an offense. The law of this State shields or excuses every person from punishment for wrongful and criminal acts when done in a state of insanity; and notwithstanding the defendant, if you so find, committed the acts charged in the indictment, yet if at the time of their commission she was in the state of insanity and you believe that such was her condition, then the law does not hold her responsible for her acts, but excuses them on account of such mental condition, and your verdict should be not guilty.

VI. Sanity is in general the natural or normal condition of the mind, and the law presumes that every one is sane until the contrary be shown. The burden of establishing insanity is consequently thrown upon the person alleging it, and seeking the immunity which the law awards to it. Insanity may either be hereditary, that is born with the person, or it may flow from disease. In general terms it may be defined as mental unsoundness. For all material purposes a particular and technical definition of insanity if it could be given would be unnecessary, as the real question is not what constitutes insanity in general, but whether and wherein exists the alleged insanity of the defendant. Neither sanity nor insanity, can be con-considered [sic] as an entity or thing of substance which can be handled and described, but rather a condition of mind to be considered in referring to other conditions. Men and women vary in the character of their mental manifestations in so much that conduct and conversation proper and rational in one might, in another of different temperament and constitution, be indicative of insanity. In determining therefore the mental condition of a person he must not be judged by any arbitrary standard of sanity or insanity nor compared with other persons unquestionably sane or insane. He can only properly be compared with himself. An author has said that a sane mind can form something of of [sic] an opinion of the workings [sic] of an unsound mind by its experience of what passes through the sound mind when dreaming, for there is a large measure of truth in the saying that a 'mad man dreams with his eyes open.' Like the dreamer, the insane mind is governed by the strongest association of ideas, and feels itself irresistibly impelled to do what its reason disapproves and its moral senses abhors. When a person without any adequate cause, adopts notions and fancies once regarded as absurd and impossible, or indulges in conduct opposed to all his former habits and principles, or changes completely his ordinary habits, temper and dispositions,- for instance the man or woman of plain practical sense indulging in speculative theories and wild projects; the staid, quiet, unobtrusive citizen becoming noisy, restless and boisterous the miser suddenly becoming a spendthrift or the spendthrift becoming a miser; the pious and discreet suddenly becoming reckless and profligate; the high minded and honorable stepping from integrity into vice and crime these may all be regarded as strong proofs of insanity. Hence it may be stated that it is the prolonged departure without any adequate cause from the states of feeling and modes of thinking and acting usual to the individual when in health, which is

the essential feature of insanity. You will apply these considerations in determining the mental condition of the defendant at the time of the commission of the acts charged, if you find that she committed such acts, and from these and such other facts as the testimony affords, ascertain whether or not her mind was diseased at the time of the alleged offense.

VII. The evidence before you tends to show that insanity may be more or less permanent or may appear in paroxysms of longer or shorter duration. There may therefore be periods during which the violence of disease is measurably abated, and the morbid action of the mind apparently suspended. During these intervals or periods the person claimed to be insane may show his or her former propriety of conduct; yet the morbid action of the mind may reappear from any exciting cause whether external or internal, and with it a renewal of the indications of insanity. To establish the existence of insanity then it is not absolutely necessary that such insane condition should, during its continuance always and upon all occasions manifest itself.

VIII. It is claimed by the defence, and evidence to their establishment has been laid before you; that defendant comes of an ancestry in which there is a hereditary predisposition to insanity, and that an aunt and nephew of the defendant have been insane and inmates of insane hospitals. Evidence proper to be considered, is also before you that hereditary influence is or may be a strong factor in causing insanity. It is also urged that the defendant from an early period in her life has been a subject of somnambulism or 'sleep walking,' or of habits resembling 'sleep walking;' that when asleep or in a seeming-state of unconsciousness she has left her bed at night and escaped or attempted to escape or leave her home; and that upon some occasions she has wandered from her home, and after returning, or being returned, has seemed unconscious as to what she had done or that she had been from home. And that she has been subject to convulsions or spasms occurring at different periods during many or the most of the years of her life. It is also claimed that at times, and without any apparent cause, the defendant has manifested ill will and irritation toward her relatives and friends; that she has done things and ordered things to be done without remembering the occurrence afterwards.

It is also claimed that the defendant for a number of years, and up to a recent period, before the commission of the alleged offense had been engaged in a large and extensive business, which occupied her time and attention, and the conduct of which involved financial operations of considerable magnitude; that she has been the editor of a public journal, and has been a constant correspondent of newspapers and periodicals; that she has recently met with reverses in her business, occasioning very serious financial embarrassment, and that she has during the greater portion of this time been the subject of physical or bodily affliction. It is urged that the long and continued strain upon her mental and physical organizations together with anxiety of mind occasioned by her financial embarrassment, so affected the health of the defendant as to produce an insane condition of mind. It is for you to say from the evidence before you whether the matters which we have recited, existed; and if you find that they have existed, it is for you to determine whether they indicate or have occasioned a diseased state of mind or not, and if they do indicate or have occasioned such diseased condition of mind, whether or not such condition existed at the time the alleged offense was committed.

XIX. It is proper for you to take into consideration the past life of the defendant, so far as you can do so from the evidence before you, and to consider her position and standing as a business woman and as a member of society, and to consider her habits and modes of life, and from all the evidence, it is for you to determine the condition of the defendant's mind. If you believe that the defendant committed the offence charged in the indictment while in a state of mental unsoundness and in consequence thereof, then in the eye of the law she would not be guilty, and must be acquitted, and in determining this question of mental unsoundness you must determine whether it was of such degree as to dethrone reason and judgement with respect to the act charged, which destroyed her power to rationally comprehend the nature and consequences of the act, and which, overpowering her will, leaving her without power to govern her mind or control her conduct in reference to the act for which she is indicted. If the defendant was in this insane condition of mind at the time of the commission of the act charged, then she is not and ought not be held amenable. And in order for you to acquit the defendant under the plea of defense of insanity, it is not necessary for you to feel satisfied of her insanity beyond all reasonable doubt. It will be sufficient, if, in your consideration of all the evidence, you are reasonably satisfied that the weight and preponderance of the evidence show she was insane; and if so satisfied, this alone will be sufficient to raise a reasonable doubt of her guilt, and it will be your duty to acquit her.

X. Upon question of science, art, skill, &c., the testimony of persons who have made these matters a subject of special study is competent evidence, although this testimony is made up of opinions founded on matters testified to by others. So also books of science and art, in which are recorded the experience, observations, and opinions of men learned or believed to be learned upon the subjects of which this books treat, are competent evidence when produced and read to you. But LO [sic] greater effect is to be given to statements read from medical or other scientific works bearing on the case, than is to be given to the testimony of

witnesses produced, sworn and examined before. In other words such works are not to be regarded as absolute authority.

XI. The defense of insanity like that of alibi is sometimes attempted to be made upon grounds neither just nor proper. But if made in sincerity it should be received with respect and considered with care. If it is established it is a full protection to the accused; for the law only intends to punish those whose freedom from mental disease is such as to hold them to criminal accountability. It does not intend to punish one who is driven by the uncontrolled impulse or a diseased mind to commit acts of wrong or violence on another. Like any other legal defense its force and value and the effect to be given to it must be determined from the facts and circumstances introduced in respect to it. That you will give to the facts a fair and conscientious consideration, and that your verdict, whatever it may be, will be the honest conviction of minds, unaffected by passion or by prejudice is not doubted.

Transcript from the "The "Davenport Democrat", 26th February 1877, p 1.

¹ **First editorial role in an entomological journal:** It was thought previously that ELLEN S. TUPPER held her first editorial role in an entomological journal in the early and mid-1870s (HORN 2005, 2012; WARNER 2011). However, her early biography from January 1870 in the journal clearly identifies her as editress of “The Bee-Keepers’ Journal and National Agriculturist” (HARRISON 1870). The journal was a merger between “The Bee-Keepers’ Journal” and “The National Agriculturist”, whereby the former had just been established in the early months of 1869. The merging greatly increased the circulation of ELLEN S. TUPPER’s Bee-Column. By April 1870 the magazine had a circulation of 27,000 copies, which until September of the same year increased to 30,000 that were produced in New York (ANONYMOUS 1875a). The original “Bee-Keepers’ Journal” from 1869, is extremely rare and we are not aware of any full run of issues from 1869 in European libraries. Individual issues though confirm ELLEN S. TUPPER’s role as the sole female editor. Additionally, an advertisement from March 1869 is the earliest mention that clearly names both HOMER A. KING and ELLEN S. TUPPER as editors of the “Bee-Keepers’ Journal” (ANONYMOUS 1869c–d). It had a much smaller circulation and was initially published at Nevada, Ohio and could be obtained for 1\$ together with an optional little book called “Hints to Bee Keepers” (ANONYMOUS 1869c). JULIA ABIGAIL FLETCHER CARNEY (1823–1908), an American poet, educator and editress also worked for “The Bee-Keepers’ Journal” and “The Bee-Keepers’ Journal and National Agriculturist” in 1869 and 1870 (HANSON 1882). She was responsible for the “Home and Fireside” department (ibid.); but the advertisements of the time did not list her as an editor but a special contributor.

² There have been several female contributors of the “American Bee Journal” in its early days in the late 19th and early 20th century. EMMA MARGARET WILSON (1852–1933) was one of them. She was the sister-in-law and assistant in the apiary of Dr. C.C. MILLER (1831–1920) and had her own bee-column entitled “Bee-Keeping for Women”. Therefore, she can be considered as an assistant editor (see ANONYMOUS 1895; THOMPSON 2017). Later, the 1940s to 1960, ADELAIDE FRASER was one of the editors of the “American Bee Journal” (See “The American Bee Journal”, 1950, p. 254; and <https://www.dadant.com/journal/> (last accessed 28/11/2019)). In the 19th century we are only aware of a few other female editors that have worked for entomological or bee keeping journals. EDITH MILLER, for example, was in 1895 the editress of the short-lived Kansas Bee Journal, which was published by Miller & Dunham in Topeka, Kansas 1895. As a matter of fact, even in the 1980s and beyond female editors in biological journals on a wide range of topics were rare (CHO et al. 2014; MAROSKE & MAY 2018).

³ **Early women in entomological societies:** While ELLEN S. TUPPER was one of the first female members of an entomological society; she was preceded by a small number of other entomological pioneers of the fair sex. Even 100 years earlier, around 1769, CATHERINE-ELIZABETH VICAT née CURTAT (1712–1772), a then famous beekeeper, was mentioned as a member of the “Bienengesellschaft in der Lausnitz”, after she had invented a new type of beehive and published numerous articles on bee-keeping (see ANONYMOUS 1772, p. 618). She was followed by a MRS. J. CURTEIS, who, from 1833–1836, was the first female member of the “Entomological Society of London” (FENWICK 2017). The society later became the “Royal Entomological Society”, which was the only one of its kind, who had admitted women since it was established in 1833. However, only three other women joined the society as members before 1875 (see HAMMEL 2019, p. 137). In 1835 ELLEN MEREDITH HOPE (1801–1878), who had just married the society’s president and founding father FREDERICK WILLIAM HOPE (1797–1862), joined and was for many years the only female member. Her main role in the society was to support her husband in acquiring insect collections and later to oversee some grants that had been created to maintain his collections. In 1849 a MRS. VINES from Lyndhurst, a Lepidoptera collector and breeder joined. She was eventually followed by SOPHIA THOMPSON (see HAMMEL 2019, p. 137). While the latter two are sometimes mentioned as full members of the society, they were only listed as subscribers. Overall until 1906 thirteen women had joined the “Royal Entomological Society” (HAMMEL 2019, p. 137). Meanwhile, in America, ELIZA ANN (FALES) BRIDGHAM (1813–1895) and LUCY WAY SISTARE SAY (1801–1885), both avid insect collectors, in 1865 and 1863, were elected as corresponding members of the “Entomological Society of Philadelphia”. The society was shortly after rebranded into the “American Entomological Society”. Until 1909 only one other woman would become a member of this society. Finally, in Germany, during the early 1870s, LINA FREIFRAU VON BERLEPSCH (1829–1899) became a corresponding member of the “Verein der deutschen und österreichischen

Bienenwirth", an apiological society that published a then important German bee magazine, the "Eichstädter Bienenzeitung" around 1870. We are not aware of any other female members of any entomological society before 1872, other than the 32 suffragettes, named later in the present article, who helped to charter the "North American Bee Keepers' Society" in 1871.

⁴ ELLEN S. TUPPER's bibliography includes more than 200 articles, reports, pamphlets, and letters. Alone in the period between 1860 and 1869 close to 100 individual works were published by her. In comparison MARGARETTA HARE MORRIS (1797–1867), who is believed to have been the most productive female naturalist in antebellum America (CREESE 1998), just wrote five entomological articles during her whole career (MORRIS 1841, 1843, 1847, 1849, 1851; OGILVIE & HARVEY 2000). CHARLOTTE DE BERNIER SCARBOROUGH TAYLOR (1806–1861), another early American entomologist, published her observations on insects in a series of around nineteen articles in literary and popular magazines, such as "Harper's New Monthly Magazine". (i.e. TAYLOR 1859a–b, 1860 a–c; see also OGILVIE & HARVEY 2000). DOROTHEA LYNDE DIX (1802–1887), better known for her decade long lobbying work on prison reform and insane asylums, was previously the only other woman that has been reported to have published an entomological article in America before 1870 (see CREESE 1998). After 1870 the number of women publishing in entomology rapidly increased in the United States. Among them were several highly prolific authors such as ANNIE TRUMBULL SLOSSON (1838–1926), who was one of the founding members of the "New York Entomological Society". She is believed to have been the most productive female entomologist in the North-eastern United States before 1901 (see CREESE 1998). However, even A.T. SLOSSON's impressive list of entomological publications before 1900 is comparably limited in extent (PATTERSON et al. 2008; see also SLOSSON 1888, 1889a–d, 1890a–c, 1892a–b, 1893a–c, 1894a–d, 1895a–e, 1896a–b, 1898a–b, 1899). In England, ELEANOR ANNE ORMEROD (1828–1900) from Saint Albans, consulting entomologist to the "Royal Agricultural Society" (1882–1892), was the most prolific female entomologist in the 19th century. She wrote 22 detailed reports on injurious insects and common farm pests, a text-book on agricultural entomology and several further pamphlets and articles, which were published from 1872 to 1899 (i.e. OGILVIE & HARVEY 2000). There were certainly several other women working in entomology during the 19th century (see BAILEY 1994; OGILVIE & HARVEY 2000), however the number of articles published by ELLEN S. TUPPER seems to be absolutely unique.

⁵ "*Woman's rights*", and "*the rights of woman*" were widely, but not the exclusively, used terms in the 19th century for what today is better known as "*women's rights*" and the "*women's rights movement*" (NOUN & BOHLMANN 2002, p. 174). The terminology hints toward the roots of the movement, because it sets the early suffragettes in the historical context and continuity of the abolitionist societies. In fact, the term "*Woman's rights*" was first used by SARAH M. GRIMKE (1792–1873) and her sister ANGELINA EMILY GRIMKE (1805–1879) in defending their work as women in the Female Anti-Slavery Societies (see GRIMKE 1838a, p. 118; GRIMKE 1838b).

⁶ Early biographies on ELLEN S. TUPPER are highly inconsistent about her date of birth. The "Bee-Keepers' Journal and National Agriculturist" for example reported that she was born on the 9th April 1823 (HARRISON 1870). Other early biographical sketches of ELLEN S. TUPPER sometimes gave 1832 as the year of birth, however, this is unlikely to be correct as other sources around 1870 described her as "*beyond the meridian of life*" (see ANONYMOUS 1871b, p. 158). Some articles mentioned later that she had married in 1843 at the age of 25 (see the "Wisconsin State Journal" (Madison, Wisconsin), 12th February 1876, p. 1 based on a report in the "Boston Globe").

⁷ NOAH SMITH JR. (1800–1868) was an American lawyer and politician from Maine and the father of ELLEN S. TUPPER. In his early years he worked as a clerk in the Providence city office where he was responsible for the local census in 1825 (ANONYMOUS 1856a, p. 73–74). Around 1833 NOAH SMITH and his family relocated to Calais (Maine), where he became the deacon of the Baptist Church in the 1840s (KNOWLTON 1875). During this time, he also became a member of the "Maine Temperance Union" (see ANONYMOUS 1845). His primary activities though were as a businessman. As such he became a cofounder of several companies such as the "Fowler and Eli Point Bridge" (1837), the "Saint Croix River Canal Company" (1846/47), the "Calais Academy" (1850), the "European and North-American Railway Company" (E.N.A.R.C.; 1850/51), and the "Saint Stephen's Gas Light Company" (1853). His business endeavours in

the E.N.A.R.C. are noteworthy in particular, because they made NOAH SMITH, among others, a business partner of ELIJAH HAMLIN (1800–1872), the older brother of the later vice-president HANNIBAL HAMLIN (1809–1891), and JOHN A. POOR (1808–1871), whose brother would become one of the founders of the rating agency “Standards and Poor”. During the early 1850s NOAH SMITH became a leading figure in Maine politics. In 1853 he was appointed as the Speaker in the Maine House of Representatives and, for a short time, he had good prospects to become the next governor of Maine (see ANONYMOUS 1854c). After the implementation of the Kansas-Nebraska-Act in 1854, which extended slavery potentially into further western Territories, the split between Northern and Southern Whigs led to the decline of the Whig party. NOAH SMITH, in the summer of 1854, was one of the last Northern Whigs to candidate on the party ticket. Supported by JOHN A. POOR and ISRAEL WASHBURN (1813–1883), SMITH was nominated as the Whig party’s gubernatorial candidate for Maine on a convention held in July 1854 (ANONYMOUS 1854d). Unofficially politicians such as ISRAEL WASHBURN already used the term “Republican” for the election platform (GIENAPP 1987). NOAH SMITH tightly lost the nomination to ISAAC REED (1809–1887), after both received 210 votes in a first round of the nomination procedure (see ANONYMOUS 1854c). He afterwards gave a graphic approval speech for ISAAC REED, which was met at that time with great applause and drew attention on a national scale *“You have nominated the right kind of man for governor, and have adopted the right platform. I hear it is anti-Nebraska, anti-rum, anti-locofoco – in short anti Franklin Pierce, whom I regard as the embodiment of all the objectionable things”* (ANONYMOUS 1854d, p. 2). Only a month later NOAH SMITH was nominated by his party as candidate for the 6th Congressional district in Maine. The Free Soilers in Maine, however, were unwilling to support NOAH SMITH and other Whig Congressional candidates, because they had not been chosen in a “fusion” convention (see ANONYMOUS 1854e). Eventually the Congressional election of 1854 saw the annihilation of the Whig Party, NOAH SMITH was one of the prominent candidates who lost his district (see ANONYMOUS 1854f). After the gubernatorial election he became a member of the council of Maine Governor ANSON MORRILL (1803–1887) and soon joined the Republican Party officially. In the early- and mid-1850s NOAH SMITH was one of several politicians who ensured passing and implementing of the “Maine Liquor Law” bill, which constituted prohibition in the State and was introduced by SMITH himself to the House (see SMITH 1855, p. 158; HERRMANN 2007, p. 25; OKAMOTO 1982). In 1857 NOAH SMITH was one of the Maine Electors of the electoral college for the 18th presidential election that made JAMES BUCHANAN (1791–1868), the 15th president of the United States (LANMAN 1876), and in 1858 he became the secretary of State for Maine, which he remained until 1860. In the presidential election of 1860, N. SMITH supported ABRAHAM LINCOLN (1809–1865) and particularly candidate for vice-president HANNIBAL HAMLIN. After LINCOLN became president, N. SMITH on recommendation of HANNIBAL HAMLIN, went to Washington D.C., where he worked as legislative clerk in the secretary offices of the U.S. Senate (WIGGIN 1923). Later he was promoted to Principal Clerk and from 1867 Chief Clerk, a position he held until his death in 1868. According to some accounts SMITH was also one of the last persons who saw LINCOLN before he was assassinated, receiving a presidential signature for a pardon of a young Calais soldier who had been convicted of treason (ALSBERG & WOODWARD 1938; CROMIE 1975).

⁸ HENRY WHEATON (1785–1848) was born in Providence (Rhode Island) and graduated at the Rhode Island College, which later would become Brown University (HICKS 1921; KELLEN 1902). After being admitted to the bar, he stayed for several years in Europe. He thus became a first-hand witness of the reign of French emperor NAPOLÉON BONAPARTE (1769–1821). Afterwards he started to practice law, a profession he would follow for 20 years in Providence and then New York (HICKS 1921; KELLEN 1902). Notably during this time he edited the reports of the Supreme Court of the United States, which appeared in 12 volumes, and worked for some time as a judge on the Maritime Court (HICKS 1921). In 1827 he started a diplomatic career (ibid.). He served in Denmark for several years (ibid.), where he published a history of the Northman including their discovery of America (WHEATON 1831). In 1835 he was appointed by President ANDREW JACKSON (1767–1845) as a minister to Prussia (HICKS 1921), where he eventually served as Envoy Extraordinary and Minister Plenipotentiary. During his time in Germany, which lasted until 1846, he negotiated several international treaties. Notably, shortly after the Opium Wars and the lifted ban of opium, HENRY WHEATON published the first edition of his most important work, the “Elements of International Law”, which would see at least eight editions and later translations into French, Chinese and Japanese (WHEATON 1836; WILSON & FISKE 1889; SVARVERUD 2007; YIN 2017). From 1847 to 1848 he was a Lecturer at the Harvard Law School (ibid.).

⁹ JOHN SMITH (1580–1631) was an English adventurer, soldier, explorer and perhaps the most legendary figure of the early colonial times in America (KUPPERMAN 1988; WOODS 1907). As a member of the “London Virginia Company” he reached America in 1607 and became one of the founding fathers of Jamestown in the Virginia Colony (ibid.). His biography, as a serial adventurer, comprised several volumes and was published during the Elizabethan times to motivate people to move to the newfound land (ibid.). During the 19th century the story of JOHN SMITH was highly popular and popularized in many books and retellings in illustrated magazines (see for example ANONYMOUS 1846, SIMMS 1846; ARMSTRONG 1860). Today the most widely known episode of his life is the reminiscence of POCAHONTAS (ca. 1595–1617) rescuing his life when he was captured in 1607 by Indians of the Powhatan Confederacy. (LEMAY 2010)

¹⁰ CHARLES HART SMITH (ca. 1832–1895) was one of ELLEN S. TUPPER’s brothers. His life is closely linked to one of founding legends of the State of Washington and its capital Olympia: In 1849 C.H. SMITH joined the so-called Argonauts, who tried their luck in the California Gold Rush. Together with his friend Captain WILLIAM H. DUNHAM (died 1851), also from Calais in Maine, they chartered the brig Orbit (BANCROFT 1890), a coppered and copper-fastened American Baltimore clipper-built vessel. Joined by other gold-hunters they sailed around Cape Horn and in early January 1850 they were the first American merchant vessel that reached the Puget Sound region in what today is Olympia in Washington State (BANCROFT 1890). There they met MICHAEL TROUTMAN SIMMONS (1814–1867), who was one of the first settlers in the area. SIMMONS purchased the controlling interest in the Orbit and established a partnership with C. H. SMITH (ibid.). The Orbit was loaded with a cargo of piles and returned to San Francisco, where C.H. SMITH sold his cargo and bought a stock of general merchandise (ibid.). In July he returned to Olympia, which according to some legends received its modern name from him (PROSCH 1906; ANONYMOUS 1918). SIMMONS and SMITH build and opened the first shop, in which they presented the cargo from the Orbit and where Smith worked as the local clerk (BANCROFT 1890). Apparently in the summer of 1851 C.H. SMITH again went for San Francisco to buy goods, allegedly taking with him 60,000 dollars in cash and credits from the community (PROSCH 1906). SMITH was never seen in Olympia again. His former partner M.T. SIMMONS, left behind broken and utterly ruined (ibid.), tried to warn everybody else by advertising in the local Oregon newspaper “*not to trust the said Smith, under any circumstances whatever*” (SIMMONS 1851, p. 3). C.H. SMITH at that time was long back in Calais, where he had married EMMA SOPHIA GREEN (born 1829) in October 1851. C.H. SMITH became a house carpenter and the family lived in Calais for many years. Later, in the 1870s they relocated to Baltimore.

¹¹ WALTER NEAL SMITH (born 1833) was one of ELLEN S. TUPPER’s brothers (BROOKS 2002). Information on his life is highly rudimentary. At the beginning of the Civil War he joined the 11th Massachusetts Infantry Regiment as a volunteer, where he served as a corporal and sergeant in the Company B, which was also known as the “*Paul Revere Guard*” (ANONYMOUS 1862). After the “First Battle of Bull Run”, the first major confrontation of the war that ended in a confederate victory, he was promoted to the rank of 1st Lieutenant and later raised to the rank of captain. His regiment was involved in many further defining Battles of the Civil War, including for example the “Second Battle of Bull Run” (1862), the “Battle of Fredericksburg” (1862), the “Battle of Chancellorsville” (1863) and eventually the “Battle of Gettysburg” (1863). Therefore, the unit suffered heavy casualties during the war. WALTER N. SMITH himself was severely injured and became permanently invalid in 1864 when he rode his horse during a messenger mission into a well that was not covered (ANONYMOUS 1889a). He later lived in Iowa, but no more details are known.

¹² ROBERT NOAH SMITH (1828–1860), one of ELLEN S. TUPPER’s brothers, was a lawyer who had studied at Brown University (1846–1850) and Harvard (1851). There is hardly anything known about his life. In 1850 he became a public notary and a “Justice of the Peace and the Quorum” in his hometown Calais. In 1852, after leaving Harvard, he married HELEN ELIZABETH DYER [SMITH / BRADBURY] (1830–1921) and became the father of two daughters who, under the names of KATE DOUGLAS WIGGIN (1856–1923) and NORA ARCHIBALD SMITH (1859–1934), would later have celebrated careers as authors of children’s novels. The marriage, however, was unhappy and ended in a divorce on the grounds of adultery in 1858 (BROOKS 2002; COLE 2008). In his lifetime ROBERT N. SMITH was known as a kind of “*erratic genius*” and “*eccentric adventurer*” who spent some time travelling through America and Europe, where it was said that he found “*many strange adventure[s]*” (KNOWLTON 1875, p. 88). There are no recollections in the family histories on

details on any of his adventures, but it seems that in the winter of 1849/1850 he was working as treasury courier in Missouri, carrying money hauled in a wagon from Springfield to St. Louis, performing a 14-day journey through rain, snow and nearly impassable roads (ANONYMOUS 1850b). He died in December 1860 after a railway accident near Springfield in Illinois (KNOWLTON 1875).

¹³ JAMES WHEATON SMITH (1823–1900) was one of ELLEN S. TUPPER's brothers. He entered Brown University in 1844 and while joining the temperance movement stayed there until his graduation in 1848 (ANONYMOUS 1900a; CATHCART 1881). Afterwards he studied at Newton Theological Institution (CATHCART 1881). He graduated in 1851 two year later became pastor of a Baptist Church in Philadelphia, where he would work until 1880 (ibid.). During the late 1850s and after his retirement in 1880 he undertook many travels to South America, Egypt, Syria and Palestine (ANONYMOUS 1912a). As a member the Pennsylvania Freedmen's Society he was engaged in humanitarian work to support freed slaves that had escaped to the Union during the Civil War (see ANONYMOUS 1864). J. W. SMITH also belonged to a circle of friends that among others included the American naturalist GEORGE A. BOARDMAN (1818–1901) and HENRY WARD BEECHER (1813–1887) (see BOARDMAN 1903, p. 38, 123 & 146). This circle had good connections to the Smithsonian Institution (ibid.).

¹⁴ SETH WHEATON SMITH (1826–1886) was one of ELLEN S. TUPPER's brothers. Together with his father and brother CHARLES he established the "Calais Gas Light Company" in 1853 (see ANONYMOUS 1853a). He was also one of the founders of the "Lewy's Island Railroad Company" (see ANONYMOUS 1853b). Later he became an Indian agent and collector from the Passamaquoddy tribe in Maine. As such he was a witness and signer of the "*Treaty of Peace made among the Passamaquoddy Tribe*" (see FRANCIS ET AL. 1852; BROOKS 2002, p. 142). In the 1860s, during the Civil War, he worked as a merchant and deputy collector for customs in Calais.

¹⁵ MILA FRANCES "FANNY" (SMITH) WHIDDEN (1824–1906) was ELLEN S. TUPPER's younger sister and named in honour of an Indian princess, a daughter of the Passamaquoddy chief and famous guide PEOL-TOMAH (1815–1890), who was a friend of ELLEN TUPPER's father NOAH SMITH JR. (see WIGGIN 1923, p. xxii).

¹⁶ JASON SHEPHERD PIKE (1811–1882) was an important but controversial American journalist in the 19th century and a native of Calais, Maine. In his early years he worked as a clerk, merchant in the grain and shipping business. "The Boundary Gazette and Calais Advertiser", who had advocated for a presidency of WILLIAM HENRY HARRISON (1771–1841), allowed him to gain first journalistic experience. His business ventures were so successful, that after 1840 he could spend the winter months in Boston, New York and Washington, which allowed him to become a correspondent for the "Portland Advertiser" and the "Boston Courier". In 1850, after an unsuccessful run as a Whig candidate for the seventh district of the State of Maine, he was invited by HORACE GREELEY (1811–1872) to become a regular Washington correspondent for the "New York Tribune", which was then already one of the leading newspapers of its time. He accepted the offer, and soon became assistant editor, a role which he intensely used to make the "New York Tribune" the journalistic heart of the anti-slavery movement, his opinions often giving voice to the most extreme positions of the political spectrum (DURDEN 1957). In 1854, after the fall of the Whig Party, the Tribune became the in-official organ of the newly formed Republican Party on a national scale. Circulation numbers of the paper reached 300,000 briefly before the beginning of the Civil War. After ABRAHAM LINCOLN had been inaugurated as U.S. president in 1861 he appointed J.S. PIKE, who had the support of vice-president HANNIBAL HAMLIN, as his minister to the Netherlands in The Hague (BROOKS 2002; DURDEN 1956; 1957).

¹⁷ WILLIAM DEMING (1804–1882) was a merchant, businessman and Lieutenant Colonel in the state troops (DEMING 1904).

¹⁸ "The Boundary Gazette and Calais Advertiser" ran from 1833 to 1836, with exact dates in the literature being conflicting (KNOWLTON 1875; GRIFFIN 1872). As far as we know, no issues of the circular still seem to exist. In its' initial prospectus it had been announced by its proprietor HENRY P. PRATT as the paper that was published "*on the line that separates Great Britain from the United States*" (GRIFFIN 1872, p. 149–150).

¹⁹ CYRUS HAMLIN Jr. (1802–1839), born in Livermore (Maine), was the son of CYRUS HAMLIN SR. (1769–1829) and ANNA LIVERMORE HAMLIN (1775–1852). He studied medicine and received his M.D. degree from Bowdoin in 1828 (WASHBURN 1874).

²⁰ HANNIBAL HAMLIN (1809–1891) was an American lawyer and politician from Maine. Originally, he was member of the Democratic Party. However, his anti-slavery positions became more and more pronounced in the early 1850s and by 1856 he joined the newly formed Republican Party. During his early years HANNIBAL HAMLIN and HORATIO KING (1811–1897), the later Postmaster General of the United States, edited the “Jeffersonian”, a democratic newspaper from Paris (Maine) (GRIFFIN 1872). In his political career HANNIBAL HAMLIN served as an elected member in the Maine House of Representatives (1836–1840), the United States House of Representatives (1843–1847) and the United States Senate (1848–1861 & 1869–1881) and briefly as the Governor of Maine (ANONYMOUS 1856b; ANONYMOUS 1860c; BROCKETT 1868; DILLER & ROBERTSON 1989; HAMLIN 1899). During their shared time in Maine politics, HANNIBAL HAMLIN became acquainted with NOAH SMITH JR. In May 1860 HANNIBAL HAMLIN was chosen to run on the LINCOLN ticket as candidate for vice-president, even though he had not met ABRAHAM LINCOLN before (ibid.). The suggestion for the nomination was strongly influenced by HORACE GREELEY, the editor of the New York Tribune, who had made an unofficial private endorsement for HAMLIN during the convention (GREELEY 1872; INGERSOLL 1873; SCROGGINS 1994). In his efforts during the convention GREELEY was supported by JOHN A. KASSON (1822–1900) from Iowa (INGERSOLL 1873). After the successful presidential election HANNIBAL HAMLIN served as Vice-President during the first term of LINCOLN’s presidency. This office at that time still had a strong legislative focus, which included a role as presiding officer of the Senate. Therefore, he recruited NOAH SMITH JR., the father of ELLEN S. TUPPER, to become a clerk in the United States Office. One additional official responsibility HANNIBAL HAMLIN’S had was to serve as an ex-officio member in the Board of Regents of the Smithsonian Institution. In this capacity he chaired and attended several of the meetings that the Smithsonian Board of Regents held between 1862 and 1864 (see HENRY 1962). As such HANNIBAL HAMLIN met many of the leading scientist of his time, who were present at those meetings. Among them was for example Louis Agassiz (1807–1873). After HANNIBAL HAMLIN had served his term as vice-president, he continued to be active in the political affairs in Washington and Maine. In October 1864 he was installed as one of the Trustees of the “*European and North American Railway Company*”.

²¹ JOB HOLMES (1797-1864) was a physician and married to VESTA HOLMES (1808–1885), a sister of HANNIBAL HAMLIN’S, the later U.S. vice-president. J. HOLMES had studied Medicine in the Medical School of Bowdoin College, where he received his M.D. degree in 1826. In 1834 the family relocated to Calais, where he acted as the local town physician after CYRUS HAMLIN had left the town (BROOKS 2002).

²² JEREMIAH CURTIS (1803–1883) was a business man from Calais (Maine). From early age on he worked as a hunter and thus started an own merchant business. In 1835 he became president of the “St. Croix Bank”, but during the Banking crisis of 1837 he nearly lost all his money (SMITH 1879). He had tried to build up a fleet of ships, but only a single vessel remained and that he used for an adventurous trip to the West Indies (ibid.). Eventually he bought a small shop in Calais and the receipt for a “Soothing Syrup”. The receipt made him a millionaire. In the 1860s a large factory in New York was build and the “Mrs. Winslow’s Soothing Syrup” became the commercially most successful patent medicine of the 19th century.

²³ SHILOMETH S. WHIPPLE was the first doctor that had established a practice in Calais. He graduated in 1818 at the Brown College. In the 1820s he worked as a physician in Boston, before he eventually relocated to Calais. In 1834 he became the member of the House of Representatives for his new home. In 1837 S. S. WHIPPLE and JEREMIAH CURTIS were two of the original founders who incorporated the “Calais and Baring Railway Company”. In the same year he also became a Surveyor of the Aroostook area (WASHBURN 1881), at that time a disputed territory between British North America and the United States. In 1838 he was elected as one of the state’s senators (ANONYMOUS 1838d). From 19th century advertisements it can be established that he also introduced Aromatic Bitters as prescribed medicines against liver disease, dyspepsia and headaches.

²⁴ The sugar packages were brought to Boston by two men named THOMAS LEE and CAPTAIN RODGERS. The identity of those two men is not completely retraceable.

²⁵ CHARLES THOMAS JACKSON (1805–1880) was a famous American physician, geologist and inventor. He was the brother of LUCY JACKSON BROWN (1798-1868) and LIDIAN EMERSON (1802-1892), the wife of RALPH WALDO EMERSON, who around 1835 was on an extensive lecture tour on “The Uses of Natural History”, which started with the inaugural lecture of the recently organized “Boston Society of Natural History” (RICHARDSON 1995; CRAMER 2009). CHARLES THOMAS JACKSON himself studied medicine and after graduation at the Medical College in Harvard in 1829 he spent three years in Europe (WOODWORTH 1897). He studied in Paris at the Sorbonne, where he made the acquaintance of many prominent scientists. Among others a letter from BENJAMIN SILLIMAN (1779–1864), founder of the “American Journal of Science” and an early supporter of coeducation, introduced him to the AUTHOR JAMES FENIMORE COOPER (1789–1851), who was living at that time in Paris (BEARD 1960). CHARLES T. JACKSON travelled extensively in France, Germany and Italy. During the cholera epidemic in Vienna of 1832 he performed many autopsies on the local victims. On his return trip to America, he travelled together with SAMUEL F.B. MORSE (1791–1872) on the SS Sully where the two scientists discussed the possible applicability of electricity for telegraphic usage, which later led to a priority dispute between the two (WOLFE & PATTERSON 2007). While working on theories of volcanic eruption he was frequently producing novel kinds of gasses. Accidents and experiments of self-inhalation eventually led him to believe that ether gasses can be used to suppress pain during surgeries, thus leading to another priority dispute (PATTERSON 2001; HARIDAS & BAUSE 2013, 2017, 2018). His laboratory also was the first to produce chloroform in the United States (JOY 1870). In 1836 he became the State geologist of Maine and from 1839 and respectively 1840 he held the same position in Rhode Island and New Hampshire (HINELINE 1988; BITTER 1978). After a stroke he spent his last years in an insane asylum – A fact which was used frequently to discredit his priority claims in different fields, but more recent biographies reinstate his important role in those discoveries (PATTERSON 1997; WOLFE & PATTERSON 2007). Ironically the poisonous lead anecdote, even though impressive, has been overlooked both in biographies on CHARLES THOMAS JACKSON as well as in his bibliography (see WOODWORTH 1897; WOLFE & PATTERSON 2007). This is even more surprising given the fact that JACKSON’s medical works in this regard were important, too, and had a large share in popularizing the dangers of lead for metropolitan water supplies (see JACKSON 1852).

²⁶ First publications: The early biographies of ELLEN S. TUPPER do not give any details on those articles or where they have been published (HARRISON 1870). It is certainly possible that they were printed in one of the local Calais newspapers. “The Frontier Journal”, “The Eastern Democrat” and “The Christian Watchman”, a short-lived Baptist paper, are all likely candidates as they were published between 1838 and 1841 by JAPHET C. WASHBURN and Son (see KNOWLTON 1875 & NORTH 1880).

²⁷ The Aroostook War (1838-1839) was a minor conflict without actual casualties and war, officially, was never declared. It was though threatened several times and the non-dissolved territory conflict between the United States and Great Britain were one of the main political topics of those days. It is noteworthy that several persons, who had played a major role in the poisoned sugar episode, also played a major part in the development of this conflict, which at a certain time nearly led to a major military confrontation between the United States and Great Britain. The conflict itself began in 1835 when the two countries were unable to find a solution for the long unresolved boundary issues in the Aroostook region in the most northern part of Maine. In 1836 EBENEZER GREELEY (1797-1869) began a census of the upper Aroostook River territory. Assuming a violation of territory, JOHN HARVEY (1778-1852), the Lieutenant Governor of New Brunswick had Greeley arrested and threatened military action if Maine continued to exercise jurisdiction in the region (ANONYMOUS 1919; STAPLES 1922). ROBERT P. DUNLAP (1794-1859), the Governor of Maine, in response announced that a foreign power had invaded Maine (BATES 2015). The situation did not escalate further at first, but a survey was initiated by HANNIBAL HAMLIN and ordered by the U.S. government (SCROGGINS 1994; BATES 2015) Furthermore, additional fortification at the northern border was commissioned (SCROGGINS 1994; BATES 2015). During the summer of 1838 a survey was performed, while simultaneously lumberjack parties from Maine and New Brunswick worked in the territory. Soon after, in July 1838, local newspapers in Maine reported that a Dr. HOLMES on his way had been ordered by the British authorities to leave the territory, which he had been deputized to survey by the Governor of Maine. HOLMES confirmed that he had met JAMES MACLACHLAN, the British “Warden of the Disputed Territory”, but that he had only a friendly chat with him. He though noticed that S.S. WHIPPLE had

been indeed received an order by JAMES MACLACHLAN, which he denied, replying that he was acting “[...] under the authority and by the command of the government of the State of Maine [...]” (BURRAGE 1919, p. 258). Originating from these events in February 1839 a group of 200 men from Maine patrolled the Northern Border and captured 20 lumbermen from New Brunswick, whom they accused of trespassing (BATES 2015). Among the prisoners was JAMES MACLACHLAN. The New Brunswick men retaliated by capturing several Maine and the Governor of New Brunswick JOHN HARVEY sent a note of protest Maine’s Governor JOHN FAIRFIELD (1797-1847), which in its content practically contained a declaration of war (SCROGGINS 1994; BATES 2015). Additionally, he told Washington and Maine officials that he would not release the prisoners until he received orders from London. Consequently, the conflict reached Washington and FRANCIS ORMAND JONATHAN SMITH (1806-1876), the Representative from Maine presented and outlined the events in the Congressional session in March 1839. The result was a massive increase of soldiers in the region that was ordered by U.S. President MARTIN VAN BUREN (1782-1862). Meanwhile, Capt. or Colonel JONA P. ROGERS was acting as a special envoy between the parties and travelled between Maine and Fredericton to find a solution and demand the release of the prisoners (ANONYMOUS 1839b). The result was the release of prisoners upon the parole of honour on both sides (STAPLES 1922). The conflict on the Aroostook region was eventually solved in the “Battle of the Maps” in favour of the British. An old map, which was claimed to have been drawn by Benjamin Franklin, was found that contained a red line which showed that the disputed territory belonged to the British Empire or respectively New Brunswick (HINSDALE 1884; GOLD 2012).

²⁸ MARY ANN MCILWAIN TUPPER (born 1794) was the Irish mother of ALLEN TUPPER and later the mother-in-law of ELLEN S. TUPPER. In Belfast of 1811 she married her husband JONATHAN ALLEN TUPPER (1787–1819), who was an American sea captain (TUPPER 1972). The couple relocated to Dresden in Maine and had four children, but her JONATHAN ALLEN TUPPER died at sea when ALLEN TUPPER was still a baby (ibid.). After her husband’s death MARY ANN MCILWAIN TUPPER worked as a milliner, first in Dresden and Bath in Maine, later in Bangor. Interestingly she was one of the first women to use advertisements in local newspapers to garner attention for her shop. Those advertisements were typically used to announce when new deliveries of good had arrived from Boston. Beside her work, Mrs. M.A.M. TUPPER was a member of the "Association for the promotion of Virtue in Bangor", which was an early Ladies temperance club. In 1839 the association established an Intelligence Office in the shops of Mrs. TUPPER and a Mrs. SILSBEE on the Main Street of down town Bangor. The two female shopkeepers were the society’s superintendents. In practice, though, the two shops were used in this regard rather as kind of early job agency, where young women from the city or country could enquire about employment in local households, given that they provided suitable references (see ANONYMOUS 1839a).

²⁹ ALLEN TUPPER (1817–1879) was the husband of ELLEN S. TUPPER, a lumber merchant and teacher. In his younger years he tried to establish himself as a minister, but a fever-attack stopped those hopes (KIRBY & KIRBY 2009). For three years he worked in Savannah (Georgia) for his rich uncle FREDERICK ALLEN TUPPER (1807–1871), who was a merchant, ship broker and member of the firm “Ladd, Tupper & Sistaire” York (TUPPER 1972; KIRBY & KIRBY 2009), who at that operated the weekly packet-ship line between Savannah and New York. ALLEN was meant to be introduced to the family business, but due to his inclinations to temperance and opposing slavery ALLEN TUPPER decided to leave and return to Maine (KIRBY & KIRBY 2009). In 1835 he became the vice-president of the “Youth’s Temperance Society” in Bangor (see ANONYMOUS 1882a). In this position he witnessed one of the first political mass mobilisations of women in the United States, when 758 women from Bangor “took the matter of temperance in their own hands” and sent in a petition to the legislature (ANONYMOUS 1882a, p. 676.). Later, as a member of the Congregational Church, he also became the president of the “Aroostook County Bible Society” (ANONYMOUS 1852a). In the 1850s he relocated together with his wife and children to Iowa. Local anecdotes from their new hometown Brighton, written down a couple of years after his death, indicate that he was a well-educated and smart man, but sometimes also a clumsy fellow, which lead to a number of absurd incidents: “It is related of him that he once went to the woods to cut a log and felled the tree upon the wagon to save loading. The wagon was smashed and this convinced him that a log is heavier in the tree than when loaded the old way. He also cut the fingers from a pair of buck gloves and fastened them in a trough of milk for his calves to

suck, and they nearly starved to death before he would give up that the idea was not practical [...]" (ANONYMOUS 1900b, p. 1).

30

AARON YOUNG JR. (1819–1898) was a deaf physician and the first botanist to study the Flora of Maine in detail. He was born in Wiscasset (Maine) and the son of AARON YOUNG SR. (born 1798), who from 1829 onwards held the Title of Justice of Peace and that of Surveyor of Lumber at the port of Bangor for a couple of years, which at the time was an important centre of Main's lumber industry (SPALDING 1920; NORTON 1935). Both NOAH SMITH JR, ELLEN's father, and ALLEN TUPPER, worked in the lumber and shipping business and thus almost certainly had business relations with the YOUNG family for many years. AARON YOUNG JR. himself was schooled at the Gorham Academy and Teacher's Seminar and later studied Medicine at the Bowdoin Medical School (1840–1841) and at the Jefferson Medical School in Philadelphia (1842) (SPALDING 1920; NORTON 1935). Sometime in 1838 or 1839 he established the "Bangor Natural History Society" and he was also a founding member of the "Gorham Natural History Society", both being the earliest societies of this kind in Maine (ibid.). ALLEN TUPPER and AARON YOUNG JR. were for some time secretaries of the society. During the early 1840s under advice FROM EZEKIEL HOLMES (1801–1865), who was an honorary member of the "Bangor Natural History Society", AARON YOUNG started a small catalogue of the local Flora of Bangor, which he published in a local newspaper (NORTON 1935). Some of his results were presented in lectures and it has been passed on that the later celebrated ASA GRAY (1810–1899) was among his listeners (SPALDING 1920). By 1843 AARON YOUNG had collected a large *hortus siccus* of indigenous plants, which he later wanted to publish in 20 volumes under the title "Flora of Maine" (see ANONYMOUS 1843b; GRAY 1848; SPALDING 1920; NORTON 1935). The Natural History Society in Bangor and Gorham though soon ceased to exist for unclear reasons, much to the dismay of AARON YOUNG JR.. When the editor of the "Maine Farmer" suggested in 1843 the formation of a State Natural History Society, AARON YOUNG replied rather consternated (ANONYMOUS 1843b, p2): "*No doubt there could be a large and useful society formed in Maine, but having spent years of time and hundreds of dollars in collecting a cabinet, illustrative of the Natural History of the State, and finally lost it and all the rest of the property we ever earned, to do a little good, we believe we shall let others try then hand at the business now, while we toil for bread. A fact in the Natural History of man has taught us, that however liberally you may feed others, they'll turn you over to the east wind for rations, if you run short yourself, and need a crust or two to keep your from starving.*" In 1847, thanks to support by ELIJAH HAMLIN, AARON YOUNG JR. was appointed as the State Botanist for Maine (SPALDING 1920; NORTON 1935). Maine's Governor JOHN W. DANA (1808–1867), who later became the Chargé d'affaires in Bolivia (1853-1859), appropriated a sum of 600 dollars to perform the first botanical survey of the State (see NORTON 1935). AARON YOUNG worked as the secretary of the expedition and participated in the exploration of Mount Katahdin (ibid.).

³¹ **Alligators in New York:** One of the most beloved and widely known urban legends are those of alligator sightings in New York, today better known as the alligators living in the Manhattan sewers (CAPO 2011; CARROL 1984; COLEMAN 1996; EGBERT 2009). As in many cases there might be an actual seed of truth in those. Most researchers of folk-tales found that the myth in its present-day details originated from newspaper gossips in the mid-1930s and that they were a result of children buying baby alligators, which were then widely advertised and later ended up flushed down the toilet (COLEMAN 1979, 1996). However, a few researchers were able to show that alligator sightings in New York were reported as early as the 19th century (COLEMAN 1979, 1996). The Maine alligator puts another twist to those stories. Incidentally we found that one of the first reports of an alligator sighted in New York dates from the winter of 1838 and thus exactly the time when ALLEN TUPPER had reported to have imported his alligator. The sighting

was reported in the New York Sun (ANONYMOUS 1838b, 1838c), which in the 19th century was widely known for invented stories such as man-eating plants, but in this case the timely link between a real event and this sighting is astounding. Furthermore, in addition to reports of alligator sightings in 19th newspapers, there is corroborating evidence that alligators were seen from time to time in the New York vicinity. In 1815 the “United States Gazette” published an article, which described that an alligator, measuring three feet and six inches, had been shot close to the Bushwick ferry in Long Island (ANONYMOUS 1815). In contrast to many other sightings, this story might be partly verifiable, because it was mentioned that it was added to the catalogue of natural curiosities that were exhibited in SCUDDER’s “American Museum” (ibid.). Beyond this, ALLEN TUPPER was not the first who had presented a living alligator in the early American Natural History Societies of the American East Coast. Advertisements from 1819 show that JOHN SCUDDER Sr. (died 1821) presented in his “American Museum” during the celebration of Independence Day a set of thirteen young alligators, “*so perfectly harmless that the youngest child may play with them*” (ANONYMOUS 1819, p. 2).

³² With a population of nearly 1600, Houlton, by 1840, had grown into the largest settlement in Aroostook County (HAYWARD 1841). The settlement was directly on the US-Canadian border, which at that time was still a disputed territory between the two countries.

³³ ELIJAH LIVERMORE HAMLIN (1800–1872) was an American lawyer, politician, historian and entrepreneur from Maine and an older brother of HANNIBAL HAMLIN, the later U.S. vice-president. From 1815 to 1817 he studied law at Bowdoin College and later graduated at Brown College (1819) and Colby College (1823). In his early career he was working as a lawyer in Waterford (1822–1829) and Columbia (1829–1835). In 1835 he relocated to Bangor, where he continued to live and work for the rest of his life. As a politician he was a leading member of the Maine Whig Party and later became one of the founding members of the local Republican Party (WILLIAMS 1885). He served several times as an elected member in the Maine legislature, the Maine State Senate and Mayor of Bangor (1852) (ANONYMOUS 1952). In 1848 and 1849 he ran two times unsuccessfully as the Whig candidate to become Governor of Maine (HOWELLS 1860). After the election of ABRAHAM LINCOLN as U.S. President he was appointed as Commissioner under the British Reciprocity treaty to negotiate the boundaries of the fisheries, which he negotiated with his British-Canadian counterpart JOSEPH HOWE (1804–1873) (WILLIAMS 1885; BECK 1984). J. HOWE at that time tried to prevent Nova Scotia from joining the Canadian Confederacy, a move which was organized by CHARLES TUPPER (1821–1915), Premier of Nova Scotia and later prime-minister of Canada (BECK 1984; BUCKNER 1998).

³⁴ See the letter of ROYAL CRAFTS SPAULDING (1800–1880), a then travelling preacher, to his wife on “The Missionary Summer”, from 16th July 1844, printed in BARNES 1891, p. 16: “[...] *Dined, to-day, with Sister Tupper, wife of widow Tupper’s son. He belongs to the Cong. Church; she is very decided Baptist. She is the daughter of Deacon Noah Smith of Calais, and writes for ‘The Mother’s Assistant and The Young Lady’s Friend’. Her Father and Mother taught the first Sabbath school, in the United States, in the City of Providence. Three times he has seen his whole class converted and united with the church. This Sister Tupper has two Sabbath schools in this place, one in the morning, at the Cong. Meeting House, of thirty scholars, which she has collected from the streets herself, and another, about three miles distant from the first, at four o’clock P.M., at the place where I preached, last Sabbath. [...]*”.

³⁵ See also another article by TUPPER (1844, p. 68–69), which was published under her new initials “E.S.T.” and sent from ELLEN S. TUPPER’s new home Houlton in August 1844. While the latter article is also autobiographical in form, it was written from the perspective of an older person recollecting family memories of a lost childhood home. The initials “E.S.T.” were later frequently used in correspondence printed in the various beekeeping journals.

³⁶ ELIZA MASON TUPPER WILKES (1844–1917) was a well-known American suffragist and Unitarian Universalist minister. During her life she started many new Unitarian churches opening positions for women who wanted to preach (TUCKER 1990). She started to preach in spring 1868 and soon worked in Neenah and Menasha in Wisconsin (HANSON 1882). In November 1869 she married WILLIAM A. WILKES (ibid.). For three years she worked in Rochester (Minn.), where she was ordained in 1871. She then lived and worked for two years in Colorado. Afterwards she relocated to South Dakota (ibid.). Already in 1873,

together with her mother and other prominent suffragettes such as MARY LIVERMORE (1820–1905) she became one of the founding members of the “Association for the Advancement of Women” and participant of the “First Congress of Women” (see ANONYMOUS 1877a). In the following years she attended many further suffragette conventions, including for example the World’s Congress of Representative Women in Chicago (1893), the Second Annual Women’s Congress in San Francisco (1895), and the International Suffrage Conference in Budapest (1913). For some time, she was the Vice-President of the “Woman’s Centenary Association” and the President of the “Home Temperance Union (HANSON 1882).

³⁷ Its’ a well-educated guess, that CHARLES T. JACKSON was the family doctor of the SMITH/TUPPER family, which is supported by his role in the lead poisoning case in Calais, ELLEN S. TUPPER’s later mentions of a famous Boston doctor being the family doctor and JACKSON’s own close business relations to Maine.

³⁸ Brighton was one of the larger settlements in Washington County at the time, as it was one of the first, where a settlement had been established west of the Mississippi in the mid-1830s in Iowa. Nevertheless, as shown by an Iowa census from 1865, it was still a small town with 1060 inhabitants and considerably smaller in the 1850s.

³⁹ The existence of this mortgages can be reconstructed by a multitude of historical local newspapers from the early 20th century, which were published in Brighton. In those attorneys announced multiple court cases that aimed to resolve unclear entries in the old mortgage ledgers of the land grant agents (see for example SEARLEY & CLARK 1903; EDMONDSON 1919). Based on those it can be reconstructed that ALLEN TUPPER bought the farm land on the 15th August 1853 and on the 13th September 1853. The mortgage amounted to \$3045 and the ledger was signed by FREDERICK ALLEN TUPPER acting as executor of the Estate of an unknown man named D. TUNER. It must be noted though that the entry in the ledgers is not identical with the date of relocation. The TUPPER family arrived in Iowa sometime in 1852 as far as it can be reconstructed and most certainly had resided at least since spring 1853 in Brighton (see also Appendix 1). The nature of those bonds in detail in this case, however, are not fully clear. Until 1855 it was a common practice of the U.S. government to issue so called “Bounty Land Grants” to soldiers for their military service.

⁴⁰ There are conflicting descriptions on the early location of the Tupper farm (see TUPPER 1855; ANONYMOUS 1867g, 1888d, 1900e; FLITNER 1889). It is certain that the TUPPER farm and ELLEN S. TUPPER’S apiary were located 3 miles west of Brighton in the 1860s. It is though not completely clear from later reports, if there had been an earlier farm house one mile north of Brighton, which was then sold to Captain SAMUEL CUTTS FLITNER (born 1816), who had introduced himself with a letter from HOLMES TUPPER, a nephew of ALLEN TUPPER, in 1857 (ANONYMOUS 1900e).

⁴¹ The “Washington Argus”, established in spring 1854 by LEWIS F. WALDEN and the physician J.F. RICE (1822–1867), was the first newspaper in Washington County (Iowa), then a frontier district, that was set in type (KECK 1869; ANONYMOUS 1880; MOTT 1925; 1928). Before that time only handwritten newspapers had existed in the county (ATWOOD 1980a; ATWOOD 1980b). Originally the “Washington Argus” was run as a Democratic paper, but after its second editor J.F. RICE left the editorial board, it changed to a neutral perspective (ANONYMOUS 1854b). By March 1855 SAM P. YOUNG and B.F. [PARKER] appeared as editors of the “Washington Argus” (ANONYMOUS 1905; 1906b). The Argus nevertheless was short-lived and only appeared from 1854 to 1856 (KECK 1869; ANONYMOUS 1880, 1906b; MOTT 1925; 1928). It was superseded by the “Washington Press”, which published from 1856 onwards and took over the subscribers of the “Washington Argus” (ibid.). Until now there was practically nothing else known about the “Washington Argus” in the literature on historical newspapers. We though can add a few additional details, which contribute to its history: LEWIS F. WALDEN is almost certainly identical with LEWIS FRANK WALDEN (1833–1924), who was a boyhood pal of the American best-selling author SAMUEL LANGHORNE CLEMENS (1835–1910), better known under his pen-name MARK TWAIN (FISCHER et al. 1995). As boys, the two swam together in the Mississippi, went on hunting and fishing trips and played with other local kids soldier and “Hunted Indian” (FISCHER et al. 1995, p. 86). From 1848 to 1851 they lived and worked together as apprentices or “printer’s devils” in the printing offices of the “Missouri Courier”, in Hannibal (Missouri), ca. 100 miles downward the Mississippi route (ibid.). WALDEN since 1858 was a pioneer minister of the Methodist church (see ANONYMOUS 1926). Before he also worked as a circuit rider in the area (ibid.). The

above mentioned anonymous article (see ANONYMOUS 1854b), which describes the change in editorship at the “Washington Argus” in September 1854, is supposedly a previously unknown text written by MARK TWAIN himself. The “Muscatine Tri-Weekly Journal”, where the article appeared, was at that time edited by MARK TWAIN’s brother ORION CLEMENS. MARK TWAIN had just returned from an extended tour to New York, Philadelphia and Washington D.C. in the previous weeks (see BRANCH et al. 1988; BODDEN 2013). The local legends of him working for several months in the printing office in Muscatine (Iowa) (BRANCH et al. 1988; BLAIR et al. 1997) and the ductus of the small article would support this. There exist no detailed accounts of the work of the “Washington Argus” itself. MARK TWAIN’s autobiography, however, provides detailed and burlesque descriptions on the daily life of an apprentice in a printing office in those early days (NEIDER & TWAIN 1917). We are not aware of any direct evidence that ELLEN S. TUPPER and MARK TWAIN ever met in person. It is though not completely impossible: SAMUEL L. CLEMENS lived for several years during the mid-1850s in south-eastern Iowa (MELTZER 2002). Very few is known of this time and his published notebooks only start in 1855 (see NEIDER & TWAIN 1917; BRANCH et al. 1988; MELTZER 2002; BODDEN 2013). However, there is one instance in his letter where SAMUEL L. CLEMENS mentions a town called Brighton that he had visited and a nurse that he had met there in previous years, but the letter is so unspecific that it does not provide any clarity (TWAIN 1862). If MARK TWAIN was in Brighton during the Cholera epidemic of July 1854 this would indeed explain, how the “Muscatine Journal” became the only newspaper in whole Iowa that was able to write about the crisis. One of the very few fragments of the contents of the “Washington Argus” that has survived in form of a transcript is an amusing little story from 1854 on a “Team of Elks” that were used to in Washington County (Iowa) to drag a buggy (see ANONYMOUS 1989). This rather unusual story is in such illuminating, because it provides a potential direct link to ELLEN S. TUPPER’s brothers in Maine. Incidentally, a very similar story has been told in Calais (Maine), with the difference that PEOL-TOMAH, an Indian chief, had captured a pair of young moose (Wiggin 1923). He brought them to one of ELLEN S. TUPPER’s brothers, who had them trained to draw his sleigh in winter (ibid.). Later, when they grew older, they became quite an attraction because they liked to jump fences with the complete sleigh and all (ibid.). They were eventually given Fairmount Park in Philadelphia (ibid.).

⁴² Note that the three reports give slightly differing descriptions of the events.

⁴³ Only a month after the cholera scourge in Brighton, FILIPPO PACINI (1812-1883) discovered the cholera bacillus in Florence (VINTEN-JOHANSEN et al. 2003; HAMLIN 2009). His discovery and publications though remained widely unnoticed for many years due to the prevailing belief in the miasma theory in Italy (ibid.).

⁴⁴ All information, quotes and the retelling in the following paragraphs are based on ANONYMOUS 1900c, p. 1. The reminiscences of the local inhabitants of Brighton on the early history of the pioneer town were collected around 1900 by the newspaper editor C.C. HEACOCK. They were published in different issues of the “Brighton Enterprise” and collated in a small pamphlet of 118 pages with the title “Local Reminiscences of the Early History of Brighton, Iowa” (HEACOCK 1900).

⁴⁵ Even though ELLEN S. TUPPER is not directly mentioned by name in the following eyewitness report there is much circumstantial evidence to believe that she participated in the described saloon incident. To start with, the letter to her uncle directly links her with the Brighton temperance movement before 1855. Furthermore, recollections on the cholera epidemic in 1854 link her to several prominent citizens who were involved in the described temperance events. Mrs. MARGARET BLAINE MEALEY for example was the mother of the already mentioned Dr. MEALEY, who was one of the town’s physicians. Mrs. JOSEPH POLLOCK also was closely related to the TUPPER family. In 1861 ALLEN TUPPER helped her husband JOSEPH POLLOCK to become postmaster in Brighton (see ANONYMOUS 1861b). Additionally, at the end of the story there is also a mention of a secret temperance lodge (ANONYMOUS 1900c). One of the main lodging houses in the 1850s was a building called the “Fleak House”. It was one of the old landmarks of Brighton and is known to have been owned by ALLEN TUPPER and RICHARD BRADEN between 1853/54 and 1857 (see ANONYMOUS 1893b). The “Fleak House” had been originally build in 1848 by SIMON PARSHAL (died 1854) as a residence and boarding house (ibid.). He though became a victim cholera epidemic (ANONYMOUS 1934). In 1857 ALLEN TUPPER had to sell the boarding house to L.B. FLEAK, who converted it into a larger hotel (see ANONYMOUS

1893b.). Finally, there is evidence that ELLEN S. TUPPER participated in different fairs to present embroideries. Those were made with almost certainty as a member of the Brighton “Ladies’ Sewing Society”, which held their own fairs in the 1850s in the court yard in the square of the town (see ANONYMOUS 1906b).

⁴⁶ ELIZABETH FARSCUL (AULD) PARSHAL (1818–1897) was the wife of SIMON PARSHAL, who had built the first boarding house in 1848 in Brighton.

⁴⁷ OLIVER H. PRIZER (born 1814) was one of the practicing physicians in Brighton and in from 1851 to 1853 the local postmaster (see ANONYMOUS 1851, 1853c; 1899 LOTHROP 1878). He was the son of JOHN W. PRIZER (born 1792) and his wife REBECCA JACKSON PRIZER (born 1797). His brother JOHN W. PRIZER (born 1825) was also living in Brighton and was one of the founders of the merchant company Cauffman & Prizer.

⁴⁸ Prohibition laws were introduced in Connecticut (1854), Delaware (1855), Indiana (1855), Massachusetts (1852), Michigan (1855), New Hampshire (1855), New York (1855), Ohio (1854), Pennsylvania (1855), Rhode Island (1852), Texas (1854) and Vermont (1852). The individual years when the laws got into effect leave some small room to interpretation due to several court cases that were associated with them. A “Maine Law” was ratified by the people in Iowa in 1855.

⁴⁹ The “Muscatine Tri-Weekly Journal” from the 2nd March 1855 contains the following humoristic sketch that very graphically visualizes the sentiments of German settlers in regard to the “Maine Liquor Law”. It was presented in form of a letter that was claimed to originate from a German interrogated as to his principles. The grotesque onomatopoeia resembling a Lower Rhinish-German-English mishmash brings together in a single paragraph the set of the core conflicts that were defining the politics of south-eastern Iowa in the mid-1850s. ORION CLEMENS (1825-1897), MARK TWAIN’s brother, was the editor of the “Muscatine Journal” at that time. The article itself gives no indication on its author. We strongly suspect that it was MARK TWAIN himself. According to his biographies it is not known where he was when this article was published (ANONYMOUS 1855b):

“To de Comity

As Ise bin come to dis Town a good vile ago and be one of de old Shittizens. I tink I schpeak some ting and as de lectshun hush come so close I got some ting to say. De demperance questshun bin ne ting vat I bin goin to schpeak apout, und de Ablition laws and de Naterlashun laws on dem bote I schpeak. Now dey say mich tings Apout demperance bebles und apout Ablishun bebles und apout forin bebles und American bebles und a greate much apout a bebles day calls ‘Sam! – Now den apout dem demperance laws. I tink day bin coot Blenty shust one ting only ish wrong I tink de jarmins shust hab de peer und de ale. Und de Irish bebles de whisky, und all de under bebles hab de brandy or vat day cant, but Sams bebles not hab noting, Vell now de ablishun laws not bin wright. I tink cause a feller bin porn plack, he not ot to go to be a schlave and more, cause he bin plack dat makes not de reszin he bin not a man, I seen Blenty plack mericans, Nexcht comes de naturlashun laws I tink day pe shust wright anuf, schpect day do a coot many jarmins Irishmans and uder bebles comes to dis land. I say schpect day de day shust eat up de produce vat ve let schpile. Sure dat is wright den noting [... unreadable ...] pout dem bebles day calls Sam: I schpeak but little cause I not know noting, but I shure he bin not unkel Sam und if he bin not unkle Sams bebles day musht be put down dat am shure ting, Now when de lection comes and dat is not long vile, all you jarmins all you Irish and all you everpodies come and vote dem shlap down den we not bin bodered with dem any more

Yours Pkpxlzuf Mphexkcirghf.”

⁵⁰ On the 16th February 1855 MARK TWAIN (1835–1910), at that time in St. Louis, wrote a letter to his brother ORION CLEMENS (1825–1897), who was the editor of the Muscatine Journal. Parts of his letter were printed by ORION CLEMENS in this Journal. The entry paragraph gave the following short description on the latest events in St. Louis: “*Eds. Journal: Whether it is because of the wagon loads of valentines, or the heaps of delayed mail matter that have just come to hand, I cannot say; but there has been a heavy run on our Post Office for about a week. It is almost impossible to get into the office at all, so great is the rush – and to get to the deliveries, after ten in*

the morning, is an impossibility. For a week or so, nothing could be seen in the bookstores but thousands of valentines. One of our stationers has sold about \$1,200 worth of this kind of nonsense. [...]" (CLEMENS 1855, p. 2).

⁵¹ For a transcript and information on this article see endnote 49.

⁵² KATE NEWCOMB TUPPER GALPIN (1855–1906) was one of the TUPPER daughters and spent most of her youth on the Brighton farm. In the early 1870s she studied at the Iowa Agricultural College in Ames, where she was graduated as one of the first women in 1874. As early as with first experiences during her sophomore year she was working as a teacher, a profession she continued in various positions in schools in Iowa, Oregon and Wisconsin. Later she became Professor at the University of Nevada, a position of which is said that at the time she was the only woman in the United States to hold equal authority (and payment) compared to men on the faculty of any university (GUINN 1915, p. 401). This position she held until 1890 when she married the widower CROMWELL GALPIN and relocated to Los Angeles. KATE TUPPER there followed her passion for theatre and drama, establishing the Galpin Shakespeare Club. During her whole career she was an active suffragette.

⁵³ MARGARET "MADGE" ALLEN TUPPER TRUE (1858–1926) was one of the daughters of ALLEN and ELLEN S. TUPPER. Already at a very early age she became an active and successful poultry breeder. By the age of 14 she was vice-president of the "State Poultry Association" in Iowa (see ANONYMOUS 1873o). After the family had relocated to Colorado she became a teacher in Colorado Springs. Like her sisters she also supported the suffragette movement. With others she was a speaker at the Woman's Congress held in San Francisco in 1894. Her perspective mostly focussed on education. In 1906 she became the first woman to be elected on the Denver School Board.

⁵⁴ HOMES TUPPER (1860-1923) was the son of ALLEN and ELLEN S. TUPPER. He worked as a farmer and teacher. While all his four sisters featured prominently in several collections of suffragette biographies, not much is known of his life. After his father died he tried to take over the business on the family farm in Dakota, yet he was soon facing considerable difficulties (see TUPPER 1904). In 1883 his sister ELIZA performed the ceremony in which he married LIZZIE WILKINSON, with whom he would have two daughters. During the 1890s he worked as an advertising agent and later in Denver as the director of music in the public schools. In 1922 he moved to Long Beach in California, where he died from a heart attack.

⁵⁵ MILA FRANCES TUPPER MAYNARD (1864–1926) was the youngest of the TUPPER daughters and strongly influenced by her oldest sister ELIZA. In young years she spent three years in Sioux Fall, where she worked as teacher (WILLARD & LIVERMORE 1897). At the age of 21 she attended the Whitewater Normal School for one year to prepare for College (ibid.). Winning a scholarship in mathematics, she was able to study at the Cornell University (ibid.). In 1889 she obtained a Bachelor of Letters degree in philosophy at the Cornell University, which allowed her to ordain, like her sister, as a Unitarian minister. Among others she held a position as pastor in La Porte, Indiana (1889–1891) and Chicago (WILLARD & LIVERMORE 1897). There she became further involved in the suffragette movement and attended the World's Congress of Representative Women in 1895. After she had married REZIN A. MAYNARD (1852–1940) the couple moved to Reno in Nevada, where both were giving lectures at the university from 1893 to 1895. In 1895 she was invited to address the Nevada State Assembly on the question of woman suffrage (ENSS 2020). However, the then discussed resolution and bill to allow the vote for women and to amend the State constitution was defeated by six votes (ENSS 2020; ELLIOTT 1987). It would be reintroduced nearly a decade later. In later years MILA FRANCES TUPPER MAYNARD started to support and lecture on women's right on a socialist platform and became active in the Socialist Party (ANONYMOUS 1912c).

⁵⁶ ROBERT SMITH TUPPER (1862–1863) was born during the Civil War in April 1862 and died at infant age on the 31st January 1863 in Brighton (ANONYMOUS 1863b). His death was announced together with a short poem, that was likely written by ELLEN S. TUPPER (ibid., p. 3):

"A little while he dwelt with us,

*Sweet minister of loves,
Then spread his wings we had not seen,
And sought his home above."*

⁵⁷ FREDERIC ALLEN TUPPER (1867–1869) was the youngest child of ALLEN and ELLEN S. TUPPER. He was born around August 1867 and died at infant age on the 28th April of 1869 in Brighton (ANONYMOUS 1869h). His death was announced together with a short poem, that was likely written by ELLEN S. TUPPER (ibid., p. 3):

*"He is not dead, the child of our affection,
But gone unto that school,
Where he no longer needs our poor protection,
For Christ himself doth rule."*

⁵⁸ ALLEN and Ellen S. Tupper had together more than ten children, only five would later survive her while the others died in infancy and young age. Data on this issue in general is highly incomplete and uncertain, especially for the time that the couple spent in Maine and Massachusetts.

⁵⁹ See the "2. Report of the Iowa State Agricultural Society, held at Fairfield, Iowa, in October 1855", printed at the Iowa Farmer and Iowa Sentinel Office, 1856, p. 27.

⁶⁰ See ABRAHAM LINCOLN's letter to HANNIBAL HAMLIN, 4th September 1860, published in BASLER et al. 1953, p. 110. NOAH SMITH, then Secretary of State in Maine, had been introduced to LINCOLN earlier in the year by a letter from HAMLIN. Apparently, SMITH gave LINCOLN reassurance that the congressional districts in Maine were not at risk during the upcoming election. HAMLIN himself at that time barely knew LINCOLN, who had just in July of that year started a correspondence with him (see BASLER, PRATT AND DUNLAP 1953, p. 84).

⁶¹ It is quite interesting to note that the location of the Republican election rally in 1860 might not have been chosen by chance. Brighton (Iowa) lies ca. 20 miles west of the town Crawfordsville. According to one local tradition, this was the place where the Republican Party was founded in February of 1854 (BOICE 1958a; JENSEN 1965; see also ENGLISH 1953). It is a well-known fact that the Republican Party was originally established by opponents of the Kansas-Nebraska Act, which allowed the potential expansion of slavery into further territories west of the Mississippi (GIENAPP 1987; HUBBARD 2013; BATES 2015). Between 1852 and 1853 several unsuccessful proposals were made how to organize the Nebraska Territory. Eventually a bill was introduced in the U.S. Senate that would revoke the previous established Missouri Compromise, which had "forever prohibited" slavery above the 36-degree 30 minutes north latitude during the Louisiana Purchase (RODRIGUEZ 2002) The bill was debated between January and March 1854 and particularly the northern Whigs were strongly against the proposal. In contrast southern Whigs were in favour of slavery, which eventually led many northern Whigs to break with their party. For many "Free-Soilers" and Whig politicians it became increasingly clear that a new party was necessary. The first step in this process was the formation of local committees which prepared resolutions against those bills. According to the local tradition the first of those meetings was the one in the Seceder church in Crawfordsville (BOICE 1958a; JENSEN 1965). The said meeting was attended by several prominent activists, which included among others Prof. SAMUEL L. HOWE (died 1877), ROBERT YOUNG, SAMUEL RUSSEL, Major SAMUEL E. RANKIN (died 1883) and MATTHEW MOORHEAD (BOICE 1958a; JENSEN 1965). A similar meeting happened in Wisconsin, where it was first suggested in a discussion with HORACE GREELEY to call the new political party the "Republican" (BATES 2015). The Kansas-Nebraska Act was eventually signed in to law by U.S. President FRANKLIN PIERCE (1804-1869) on the 30th of May 1854 (GIENAPP 1987; BATES 2015).

⁶² See: "Report of the Adjutant General and acting Quartermaster General of Iowa, made in accordance with the laws of the State, to Hon. Samuel J. Kirkwood, Governor of Iowa, by Nathaniel B. Baker, Adjutant General and acting Quarter Master General", January 1, 1863, F.W. Palmer, State Printer, Des Moines, Vol. I., p. 1063 describing a mustering at the 25th August 1862. See also: BURRELL 1909, p. 472.

⁶³ During the Civil War trade on the Mississippi route was indeed severely limited by regulations and controls (COULTER 1919). Sugar and molasses were two of the main commodities that were traded by the Confederacy against food supplies from the Northwest and Ohio (COULTER 1916). Trade of sugar became much more difficult after August 1861 when stricter regulations and provisions were implemented (ibid.). While prices for sugar increased significantly in the Northern States, inside the Confederacy exactly the opposite was the case as supplies were much higher than the demand (ROLAND 1951). Some producers in the South were not able to sell their sugar at any price. Thus, there were large financial incentives for smuggling sugar upwards the Mississippi. The Mississippi trade route though was never completely closed and there were many loopholes that merchants could exploit to continue business operations (COULTER 1919; BREITENBACH 1980).

⁶⁴ Sorghum sweetener became indeed much more popular and widely grown during the Civil War, but it was especially farmers in the Southern States who were able to be somehow commercially successful in production (BONNER 2009). One of the Northern States that was particularly successful was Iowa, where Sorghum based syrup production was largely upscaled during the Civil War (KARON 2010).

⁶⁵ ELLEN S. TUPPER's knowledge and consideration of sugar prices on businesses decisions is apparent in later publications. In 1867 she wrote: "*The price of sugar, of late years, has given an impulse to the business in the increased price of honey and wax: these are in demand in all parts of the country, while in many parts, bees have doubled in value, and in some places cannot be bought at any price*" (TUPPER 1867h). In fact, the Agricultural reports from Iowa and from the U.S. Department of Agriculture also discussed sugar, sorghum cultures and syrup production quite in detail

⁶⁶ The book ELLEN S. TUPPER referred to in her autobiography was "Quinby's Mysteries of Bee-keeping Explained" (QUINBY 1859), which she recommended on several occasions. Another book, which "was more fascinating to [her] than any work of fiction [she] ever read]" was "Langstroth on the Honey Bee" (see TUPPER 1862).

⁶⁷ "The Burlington (Weekly) Hawk Eye" was a long running Iowa newspaper which had initially been established in 1839 as a Whig newspaper under the title "Iowa Patriot" (MOTT 1928). During the first decades the paper underwent several changes in names and ownerships (ibid.). It was one of Iowa's most successful newspapers and had a circulation of 1,200 copies (MCMURTRIE 1935). In the early 1860s, when ELLEN S. TUPPER was writing for the paper, the "Burlington Hawk Eye" was owned by CLARK DUNHAM (1841-1871), who was also its' editor and strongly supported the Republican cause. At the time of his death obituaries in the State worshipped him as the "*fallen oak of Iowa journalism*" (ANONYMOUS 1871c, p. 1). One of the interesting side notes on the Burlington Hawk Eye is that NOAH SMITH JR., ELLEN's father, had subscribed to it in July 1860 to be delivered to Maine (see the "Burlington Hawk-Eye", 28th July 1860, p. 3).

⁶⁸ TUPPER 1861a; 1861b; 1861c. The first article was signed "T.". For additional verification see ANONYMOUS 1873a.

⁶⁹ Care of bees appropriately belongs to women: ELLEN S. TUPPER's first article covered the topic already quite in detail: "[...] *Our busy farmers have so much on their hands that if left to their care at this busy season of the year, bees are sure to be neglected. I would like to persuade every farmer's wife to take possession of the bee hives as she does of the chicken coop, and make it a study how she can best care for them. I can insure any one who takes this course, that she will be well rewarded both in the pleasure and profit of the operation. The more one examines into this subject, the more interested they become, and all who go about the study in earnest find it possesses a wonderful fascination. The advent of the Sewing machine has commenced a new era in the life of women. The day is near at hand when wives, mothers and daughters are to be relieved in a great measure from the eternal 'stitch, stitch, stitch,' [...]. This release will give leisure for many new and pleasant out of door employments, and among them I hope that of bee keeping will find a large place. The profit from a single hive of bees in a short time would purchase a sewing machine, and the time saved by the machine would amply suffice each day for the care of many hives. If the eye of some farmer's daughter rests on this article, let me urge her to give the idea more than a pressing thought.*

Follow me to the end of these articles, and allow yourself to become interested in the subject, and I think I can show you a new, interesting and pleasant employment. [...] (TUPPER 1861a, p. 1).

⁷⁰ WILLIAM DUANE WILSON (1809–1877) was an American editor, publisher and uncle of the later U.S. President WOODROW WILSON (1856–1924). He had emigrated together with his parents from Northern Ireland (MOTT 1936; HALE 1912). His father JAMES WILSON (1787–1850) started a publishing career in the printing office of the “Aurora”, a daily newspaper and political outlet of President THOMAS JEFFERSON (1743–1826) and his Party (ibid.). Over the years his father and brothers established several successfully running newspapers in the country and WILLIAM D. WILSON thus learned the business from infancy (MOTT 1936). At the age of 23 he was conducting the “Advocate” in Pittsburgh (ibid.). In the following years he was the publisher of several newspapers, in many of which he was able to secure interests (ibid.). In 1845 WILLIAM D. WILSON and RUFUS KING (1814–1876), later appointed by President ABRAHAM LINCOLN as his Minister to the Papal States, started the publication of the “Milwaukee Sentinel and Gazette”. From 1850 to 1852 WILLIAM D. WILSON was linked to the Census Bureau in Washington D.C. (ibid.) and in the latter year he became a member of syndicate of Whig politicians that acquired the “Chicago Tribune” (MOTT 1936, 1963; SEAMAN 1942). From 1852 to 1853 he thus became one of the journals publishers (KINSLEY 1943). In 1855 he relocated to Iowa, where he worked as editor of the “Iowa Farmer and Horticulturist” (ibid.). The magazine had an important role in establishing an Agricultural College in Iowa (MOTT 1936). For some time, WILSON worked as Secretary of the Board of Trustees of the State Agricultural College (MOTT 1936; DIXON 1876). From 1865 to 1869 he had a leading role at the Department of Agriculture in Washington D.C. as (ibid.). Afterwards he returned to Iowa where he served as editor of the “Homestead” (MOTT 1936; SEAMAN 1942; SMITH 1930). At that time, he was the chief promoter and organizer of the local Iowa Granges (SCHMIDT 1950).

⁷¹ Mass-Production: Of the 180,000 copies of the “Report of the Commissioner of Agriculture for the year 1865”, which was ceremonially presented to U.S. President ANDREW JOHNSON (1808–1875), 145,000 were printed for the members of the House of Representatives. 20,000 copies were given to the Commissioner of Agriculture. An additional set of 20,000, approved by the Senate of the United States, were printed for the Senate’s use (17,000) and for the Department of Agriculture (3,000). ELLEN S. TUPPER’s essay on beekeeping therefore was probably the most widely distributed naturalist publication of any female scientist.

⁷² LUCINDA HARRISON (1831–1904) was a prominent American beekeeper from Illinois. During her early life she worked for some time as a teacher. She married ROBERT DODDS of Woodford county and became a farmer’s wife particularly interested in cultivation of small fruits (BONHAM 1883). After the early death of her first husband she became the wife LOVELL HARRISON on Independence Day 1866 (ANONYMOUS 1890a). Her first writings on horticulture and pomology appeared in “Colman’s Rural World” and in the “Germantown Telegraph” (ANONYMOUS 1893a; BONHAM 1883). Later, after being infected with the “bee-fever”, she wrote extensively on bees and their management. Most of her articles appeared in the “Prairie Farmer”, the “American Bee Journal” and “Gleanings in Bee Culture” (BONHAM 1883).

⁷³ Emphasised as in the original article.

⁷⁴ The “Prairie Farmer” at that time was a medium sized weekly magazine “devoted to Agriculture, Horticulture, Mechanics, education, home interests, general news and markets”. It was printed on the steam presses of the “Chicago Tribune” and was publishing on a weekly basis (ANONYMOUS 1951). Its issues appeared every Saturday. An index was provided twice a year. Around 1869 the magazine, which was printed in Chicago, had an assumed circulation 25,000 copies. It claimed that it was the most widely circulated agricultural journal west of New York. The subscription price was 2\$.

⁷⁵ SAMUEL WAGNER (1798–1872) was an American banker, beekeeper and journalist. From 1834 to 1862 he was the cashier for the York Bank. During his last year in this position, in 1861, he established the “American Bee Journal”, a publication which is still in print today. Two years later in April 1863 he was appointed by a protégée, JOHN W. FORNEY (1817–1881) a relative of his, as a financial clerk of the United States Senate. FORNEY at the time had been the Secretary of the Senate, a position he had gained with the direct support of ABRAHAM LINCOLN, thus making him one of the most influential politicians in the U.S.

capital. WAGNER thus became a colleague of ELLEN S. TUPPER's father NOAH SMITH. After LINCOLN's assassination, FORNEY initially supported President ANDREW JOHNSON (1808–1875). However, during the first impeachment procedure of an US President in history, which aimed removing Johnson from office on the ground of charges of “high crimes and misdemeanours”, FORNEY switched sides, joining moderate Republicans in Congress. In control of one of the major Washington newspapers, “The Chronicle”, many attacks on the President were published. Furthermore, he also started to protégé ULYSSES S. GRANT (1822–1885) (NELSON 2003). In that capacity FORNEY wrote a Grant-for-president story, thus paving the path for the next president (ibid.). In June 1868, shortly after the conclusion of JOHNSON's Senate trial, FORNEY retired from his position as Secretary of the Senate. However, both WAGNER and FORNEY had by then found themselves long in the middle of their own scandal. A committee had been established to examine FORNEY's accounts and found that 35,486 \$ were missing (ANONYMOUS 1868). WAGNER resigned from his position on the 23rd December 1867 and admitted that he had misapplied 20,000 \$ for his own use but denied being responsible for the remaining amount unaccounted for (ANONYMOUS 1868). Some of the contemporary newspaper insinuated that WAGNER was protecting further accomplices (ibid.). The investigation ended with WAGNER repaying the 23,000 \$, presumably with the support of his mentor (ibid.). As a beekeeper, continued to publish the “American Bee Journal” until his death. He also held several patents on beekeeping.

⁷⁶ The term “Dzierzon theory” does not necessarily refer to a single theory, but rather to different aspects of the collected works of the apiarist JOHANN DZIERZON. Most commonly it refers to his discovery of parthenogenesis in honey bees (ZIRKLE 1951). According to this theory, which is today commonly accepted, male drones develop from unfertilized virgin eggs, while queens and workers are produced from fertilized eggs (ibid.). It was this assumption that let him start with the crossing of German and Italian Bees, whereby he discovered that drones of the two types developed in equal numbers (ZIRKLE 1951). Some authors believe that this might have been one of the original observations that led GREGOR MENDEL begin with his artificial fertilization and hybridization experiments in peas (ZIRKLE 1951; see also MIELEWCZIK et al. 2017; MIELEWCZIK 2017). Beyond this the “Dzierzon theory”, at least in the context as discussed by ELLEN S. TUPPER, included his pioneering experiments moveable comb hives.

⁷⁷ WILKINS MICAWBER is a fictional character from “David Copperfield”, who was depicted as a gentleman with never fading optimism. Suffering from financial difficulties, he had to spend time in a debtors' prison. Despite the many flaws in his character, his wife EMMA MICAWBER strictly rejected to leave him and their five children.

⁷⁸ MATTHIAS LANE DUNLAP (1814–1875) was a farmer, journalist and editor from Illinois. In the 1840s he became involved in the nursery business, and later, in 1856, he established his own farm south of Champaign (Illinois), where he planted a large orchard and a vineyard (MATHEWS & MCLEAN 1886). During his lifetime he thus became famous as the one who had disproven the idea that fruits could not be grown on the prairie (ibid.). His first articles appeared in the “Gem of the Prairie”. From 1853 onwards, he was the editor of the agricultural department of the “Chicago Tribune” for twenty-two years (MATHEWS & MCLEAN 1886). Many of his articles there were published anonymously or under his pen name “RURAL”. Additionally, he was a special contributor of “The Prairie Farmer”, and from 1860 to 1865, editor of “The Illinois Farmer” (ibid.). In that capacity he was well acquainted with ELLEN S. TUPPER's work and publications from early on, which he praised in several of his own articles. He was an active promoter for the employment of women in agriculture and a leading member of several horticultural and pomological societies. For example, he served as Chairman of the Fruit Committee of Illinois (1858–1869) (WILDER 1875, p. 25). As discussed later in the present article, he played an important role in recruiting women into the American Bee-Keepers' societies during the early 1870s. In 1860 he was tendered by President ABRAHAM LINCOLN for the role of Commissioner of Agriculture but had to decline the offer due to business reasons (MATHEWS & MCLEAN 1886). Quite interestingly, much like ELLEN S. TUPPER, M.L. DUNLAP had strong ties to the Maine political establishment.

⁷⁹ Sorosis, established in 1868, was the first professional women's club in the United States. The first sororities were established under this name to differentiate them from the common fraternities.

⁸⁰ “The Rural Gentleman” was a short-lived subscription based agricultural magazine from Baltimore, which ran from September 1866 to 1869 and continued then for another year under the title “The Rural Gentleman and Ladies’ Companion” with a claimed circulation of 2,000 copies (ROWELL 1870; STUNTZ & HAWKS 1941). See also ANONYMOUS (1873a).

⁸¹ “Hearth and Home” was a weekly illustrated magazine. It was published in New York from 1868 to 1875. It appeared Saturdays, contained sixteen pages and had a claimed circulation of 40,000 copies in 1869. It’s original editors in the first year, at the time when ELLEN S. TUPPER was writing for the journal (TUPPER 1869a–f), were DONALD G. MITCHELL (1822–1908) and HARRIET BEECHER STOWE (1811–1896), author of the best-selling novel “Uncle Tom’s Cabin” (DUNN 1922; HILDRETH 1976; ROBBINS 2011). In this context it quite interesting to note, that beginning from the 1850s Washington County was visited frequently by several prominent people, who stayed at a local Hotel in Brighton’s neighbour-town Washington (Iowa). Among them were RALPH WALDO EMERSON, BARNUM, ANNA DICKINSON, HENRY WAARD BEECHER and THEODORE TILTON.

⁸² DAVIES LAFAYETTE ADAIR (1824–1904) was an American entrepreneur, veteran of the Mexican war, editor and horticulturist from Hawesville in Kentucky, which was then one of the most notorious places in the Wild West. As a bee-keeper at that time he had become a rival of ELLEN S. TUPPER after he started selling his own patented bee-hives. This might explain the harsh comments made by her. A provocative style was indeed commonly used by ELLEN S. TUPPER in her published replies to the letters she had received. However, the specific example rather amusingly highlights that recipients of her puns must not have been offended, necessarily. In this specific case, the hog and bee pun by ELLEN S. TUPPER turns out to have been rather an insider joke among friends. While screening through the historic newspapers of Brighton we noticed that a Mr. ADAIR had once lived there for a couple of years. This gives a solid explanation of this little pun, because Brighton in the late 1840s and 1850s was for a time the largest pork packaging station west of the Mississippi (ANONYMOUS 1900d, 1912b). Thousands of hogs had to be dressed, cured and transported to larger market places, because the surplus of hogs was so great (ibid.). The biography of DAVIES LAFAYETTE ADAIR is not well known. In the early 1850s he gained his first experience in publishing. He had founded the short-lived “The Spirit of Enterprise”, which today is lost. He then started to work as an editor for the “Pick and Plow”, one of the earliest Kentucky newspapers, which ran from February 1853 to the end of 1854. It received the distinction of being “*the best paper that any ‘one horse’ town can boast of on the Ohio river*” (see the “Evansville Daily Journal”, Indiana, 18th February 1853, p. 2). In 1869 ADAIR eventually started his own Bee-journal, the “Annals of Bee Culture”, which ran until 1872. At that time however, conflicts with ELLEN S. TUPPER seem to have been resolved as she also was a regular contributor to ADAIR’s journal (see TUPPER 1870a, 1870b, 1872a, 1872b), which even praised her as “*famous for her success in scientific bee culture and as an authoress*” (see ADAIR 1872, p.2).

⁸³ CHARLES C. MILLER (1831-1920) was a physician and commercial beekeeper. He was an active writer for the “American Bee Journal” and in the American apiarist community he was also famous for his work as a composer of the several bee songs. In his later years he wrote a series of biographical books on his experiences as a beekeeper.

⁸⁴ See for example the advertisements in “The Prairie Farmer”, 1867, p. 291.

⁸⁵ See for example the advertisements in “The Prairie Farmer”, 1866, p. 403 and “The Prairie Farmer”, 1867, p. 13, 29, 76 & 94.

⁸⁶ See for example the advertisements in “The Prairie Farmer”, 1867, p. 207, 389 & 421

⁸⁷ A more detailed description on her purity tests was given in TUPPER (1866p, p. 412): “*The tests or signs of Purity in Italian bees are variously laid down ‘in the books’ and in the circulars of those rearing queens for sale. One tells you that all queens which produce workers having three rings of gold are ; others say that a queen cannot be called pure whose young queens or those reared from her eggs are not invariably bright and like herself ; while others go still further, and would have all queens in the second generation well marked before the purity of the original is decided. I approach this subject with diffidence, having had no*

opportunity of comparing my bees with those of others, and no teachers except my own reading and experience, but I have queens from three different importations, all warranted pure to me, and I have been engaged in rearing other queens from these for three successive seasons, spending my whole time in the business. My method of testing the purity of my young queens is this: I wait until I see their worker progeny ; if these are like the parent, well colored and distinctly marked, I always find that their progeny is peaceable, not easily irritated, disposed to cling to a comb instead of flying off in confusion when it is lifted out, as the common bees do; with such queens I am disposed to feel satisfied, and with nothing short of this. Every doubtful queen I replace at once, and I preserve none that are not well covered."

⁸⁸ ADAM GRIMM (1824–1876) was an American beekeeper of German origin. He was born on the 24th April in the little village of Holenbrunn (Bavaria) and had inherited his interest in beekeeping from his father (HACHTEN & ALLEN 2009; SCHMID 1877). For several years he worked as a secretary for the local lawyer VOGEL, a position which he lost shortly after the German revolution in 1848 (ibid.). In 1849, he married and immigrated to America, where he established a commercial bee farm in Jefferson (Wisconsin) (ibid.). He soon had a large stock of more than 400 colonies of black bees (ibid.). Around 1865 he decided to Italianize his complete beekeeping production (ibid.). In 1867 he travelled to Germany and Italy and returned with a large number of Italian bees to America (ibid.). He was a regular contributor for the "American Bee Journal" and at the time of his death he had become one of the largest honey producers in the United States (ibid.).

⁸⁹ It is a remarkable coincidence, that this discussion on questions of individual hereditary characters in America started in the December of 1866, the same month in which GREGOR MENDEL (1822–1884) published his classical work on genetics and artificial fertilization in peas. According to the traditional historiography of science it is highly unlikely that any person in America before 1900 had any knowledge of MENDEL'S work (MIELEWCZIK et al. 2017). The only known exception to this is FRANTIŠEK MATOUŠ KLÁČEL (1808–1882), a Czech poet, journalist and revolutionary of 1848, who had worked as a fellow monk in Mendel's cloister and supported him in his plant experiments. In 1869 KLÁČEL immigrated to the United States, initially settling in Iowa City. Otherwise it was only known that four copies of Mendel's work had been sent to the United States in the winter of 1866/1867. However, even though it was known which libraries and Natural History Societies had received copies of MENDEL'S work, it has remained unclear so far, which individuals in America in detail had received those copies and were thus in direct correspondence with Natural History Society in Brno (ibid.). Very likely one of the recipients was SPENCER FULLERTON BAIRD (1823–1887), the second Secretary of the Smithsonian. It remains an interesting question, however, if SAMUEL WAGNER, the editor of the American Bee Journal knew about MENDEL'S paper. At the time he was the librarian of the U.S. Senate, was fluent in German and probably quite closely linked to the Smithsonian Institution. The timeline is tight but would fit and it would particularly provide an additional background to the curious priority dispute that arose between 1867 and 1873 between American and German beekeepers. Incidentally there is another interesting aspect, which makes such a reading more likely. In the summer of 1866 Gregor Mendel's hometown Brno was the centre of the Austro-Prussian war and a cholera epidemic, which made Brno interesting on an international perspective. As we found out, the Chicago Tribune in the summer of 1866 had a special correspondent in Brno who reported from Moravia (see ANONYMOUS 1866g). This makes it much more likely that somebody in America got notice of the paper and beyond this it gives for the first time a clear idea how the four copies of Mendel's paper might have ended up in America and how the local Brno Natural History Society in 1866 got into contact with Natural History Societies in America.

⁹⁰ See "Nebraska Advertiser" 1869, 4th March 1869, p. 4.

⁹¹ The "Bee-Keepers' Journal and National Agriculturist" started to circulate in the winter of 1869, combining consolidating the two older journals "The Bee-keepers' Journal" and the "National Agriculturist and Working farmer" (STUNTZ & HAWKS 1941). It was published until 1874, from 1872 onwards under the title "National Agriculturist and Bee Journal, for the farm, apiary and fireside" (BOLTON 1885). At that time the magazine was one of the scientific journals with the highest circulation numbers. Already in 1870 30,000 copies of the magazine were printed each month. This was only possible because

new printing technologies had been developed. Electrostatic copying allowed a faster and better production and the introduction of high-quality printing of engravings.

⁹² HOMER ARTHUR KING (born 1833) was an American beekeeper best known for his “Bee-Keepers Textbook”, which he edited for several editions, and which eventually would see at least 52,000 printed copies and 24 editions (KING 1879, p. 219). In the early 1870s he served as the secretary of the American Beekeepers’ Society. He also was an inventor, who patented improvements to beehives and bicycles. After 1875 he retired from the bee business to spend time following a more religious career (KING 1879, p. 219).

⁹³ See advertisement in “The Atchinson Daily Champion” (Atchinson, Kansas), 22nd December 1869, p. 3.

⁹⁴ MISS LYDIA CRABTREE TUPPER (1838–1914), born in Hallowell (Maine) was the daughter of HOMER TUPPER (1794–1870), a younger brother of ALLEN TUPPER’s father (see TUPPER 1972, p. 432). Her father was a shipping agent in Manhattan and in 1852 he settled in Brooklyn, where LYDIA C. TUPPER graduated at the Brooklyn Heights Seminar (ANONYMOUS 1914). She was a member of the Plymouth Church and during the time of HENRY WARD BEECHER superintendent of the church’s sewing school (ibid.).

⁹⁵ Recollection of ELLEN S. TUPPER on reading experiences during her childhood: “[...] *In those days, long, long ago, (for we are old now, dear reader), magazines and papers for the young did not come by dozens as they do now, and we had really little good literature for children, our parents took pains to obtain such books as were instructive and pleasing, and we doubt if half the young people now have half the amusement in their greater variety. We know to those precious hours we owe a love for reading and a taste for study, which has cheered us through life. Some of the books read in that way we take up now, and find incident after incident as fresh before us as when we heard them from the lips of a brother thirty years ago. Cooper’s ‘Last of the Mohicans’ we opened a few months ago ; and as we turned over the pages we could not read for the tears which blinded us, as memory recalled the face and the voice of the dear brother, who read it to us in his own happy way. We write this to remind all parents how much they may do every week in the year to make home attractive to the innocent youth committed to their care [...] Let no father feel that his whole duty to his children is performed when he provides well for the bodies if he neglects their minds and affections.*” (TUPPER 1869y, p. 87)

⁹⁶ For a history of Women’s Suffrage before and after 1868 see NOUN 1969.

⁹⁷ For further details on the biography of ANNIE SAVERY see NOUN 1996 and NOUN & BOHLMANN 2002.

⁹⁸ The “American Emigrant Company” was a large-scale business venture with different purposes. On the one hand it tried to furnish skilled and unskilled workers from Europe to America (PECK 2000). This was a direct response to labour-shortage in America. On the other hand, a second purpose of the company was to sell State- and Indian lands in different areas of the country. In this regard it was one of the largest real estate speculations ever made. The company was officially established between 1863 and 1864 in Connecticut. The names of the main stockholders are legion and include many of the most prominent abolitionists, reformers for women’s rights and particularly those which were linked to the “Nook Farm” Literary Colony. Among them were for example JOHN HOOKER (1816–1901), the companies’ treasurer and secretary and HOOKER’s brother-in-law FRANCIS GILLETTE (1807–1879), the companies’ vice-president. JAMES C. SAVERY, ANNIE SAVERY’s husband, was also a stakeholder and officer of the company and especially responsible for the relations to Washington D.C. and the management of the company’s interest in the Middle West (NOUN & BOHLMANN 2002).

The “American Emigrant Company” widely advertised in England, Scandinavia but also in many other European countries, and the company was very successful to gaining support from prominent American politicians, reformers and businessmen, who vouched for the company. The most prominent and active of them was probably HENRY WARD BEECHER (1813–1887) whose letters promoting the company appeared in many books and newspapers of that time.

It is often believed that the company was not particularly successful, went bankrupt already in 1870 and that it never succeeded in recruiting more than a few thousand immigrants (i.e. PECK 2000). However, this

seems to be not fully correct. First, the company still existed until 1893 before it went bankrupt. However, during the mid-1870s the character of the company changed. There were still agents for Scandinavia who communicated over the Swedish Language newspapers in America, but their offers became more like banking and money transfer operations. Around 1877 for example immigrant of Swedish origin could use the company to send money for Christmas back to their European homes and family. Second, according to its own statements, the “American Emigrant Company” had settled 100,000 families in the West and that they had agents in Sweden, Finland, Denmark and Norway (Anonymous 1890b). Its original roots date back even further into the early 1850s when the Homestead acts opened the Nebraska Territory for land claims. At this time JAMES C. SAVERY, who had just arrived in Iowa was a leading member of a party that examined the region which today is Omaha City. A small forgotten local legend, told by JAMES C. SAVERY in 1887 and recounting the events that gave Omaha its name, is the earliest surviving origin of the company we could locate: “Colonel James Redfield, of Albany, was really the projector of Omaha. He and eleven others went into the Council Bluffs and Omaha Ferry Company, each putting in \$400. Col. Redfield borrowed \$400, and got me to indorse for him. The company then plotted the town. When Redfield’s note came due he couldn’t pay it, and he then offered me his share of the town site, but I declined to accept it. There was a white crank, with long hair, who claimed to be an Indian doctor, and went by the name of Omaha. One night at the Pacific House, in Council Bluffs, while the townsite men were on a drunk, it was agreed to call the new town Omaha, after this crank Indian doctor. That’s how Omaha got her name. In due time Col. Redfield sold his interest at cost. He was a Colonel in the Union army of the war of rebellion, and was killed on the field of battle” (ANONYMOUS 1887b, p. 7). Finally, there is another historical origin of the company: The Kansas-Nebraska Act and the abolitionist activities of HENRY WARD BEECHER. Most prominently his interference in the Kansas Ruffian and “Bleeding Kansas” affairs by sending his notorious so called “Beecher Bibles” (fast loading Sharps rifles) (DELOMBARD 2002).

⁹⁹ The visit of the American delegation in Europe is attested by several newspapers from 1866 (i.e. ANONYMOUS 1866f). ANNIE SAVERY’s trip to France almost certainly was business related. In 1865 the “American Emigrant Company”, in which her husband was superintendent, was officially established and tried to recruit settlers from the European continent. The Universal Exhibition in Paris in the following year was certainly a good place to start and draw attention.

The journey links ANNIE N. SAVERY and her husband to many prominent American politicians, diplomats and their families. The reception at the Tuileries in Paris happened on New Year’s Day 1866. Among the 24 American guests were among others:

1.) Gen. Maj. J. M. SCHOFIELD (1831–1906), who was on special diplomatic mission for President Andrew JOHNSON to urge for the withdrawal of French troops from Mexico (GRIFFIN 2003; CONNELLY 2006). He later became the Secretary of War (1868–1869);

2.) NELSON MARVIN BECKWITH (1807–1889), who was an American businessman and merchant. He had made a fortune with an extensive trade with the British colonies, Europe, the West Indies and South America and speculations at Wall Street (ANONYMOUS 1889b). Retiring in 1850 he spent much time in Europe and China, before eventually settling with his family in Paris where he advocated for an improved railroad system in the United States (ANONYMOUS 1889b; CRAIUTU & JENNINGS 2009). During the American Civil War, he provided the U.S. government with valuable foreign intelligence and also witnessed ABRAHAM LINCOLN’s offer to the Italian freedom fighter GIUSEPPE GARIBALDI (1807–1882) to take over part of the Union Army (FRY 1982). In 1866 BECKWITH was the United States Commissioner General for the Paris Universal Exposition that was planned for 1867 (BLAKE 1870; ANONYMOUS 1889b). For his work in this position Emperor NAPOLEON conferred upon him rank and cross of an Officer of the Légion d’honneur (ANONYMOUS 1889b);

3.) OLIVER P. MORTON (1823–1877), who was at that time Governor of Indiana. In October 1865, after suffering a stroke that partially crippled him, he travelled to Europe to seek assistance from medical specialists;

4.) Mrs. MARGARETTA W. PIERREPONT and MISS MARGARETTA PIERREPONT (BECKWITH), the wife and daughter, respectively, of EDWARDS PIERREPONT (1817–1892), who at that time served as minister to England (1866–

1867). Before he had worked as ABRAHAM LINCOLN's personal advisor. In autumn 1867 EDWARDS PIERREPONT conducted the case of the State against JOHN H. SURRAT (1844–1916), who was accused of having participated in the assassination of President ABRAHAM LINCOLN;

5.) Mrs. LUCY H. L. HALE (1814–1912), the wife of JOHN P. HALE (1806–1873) at that time US minister to Spain (1865–1869), and her two daughters Miss ELIZABETH HALE and LUCY LAMBERT HALE (1841–1915);

6.) JOHN GEORG NICOLAY (1832–1901), who at that time was the United States Consul in Paris (1865–1869). Before that time, he had served as the private secretary of President ABRAHAM LINCOLN. He later served as Marshal of the United States Supreme Court (1872–1887) and collaborated on the official ten volume biography of ABRAHAM LINCOLN (NICOLAY & HAY 1914); and

7.) JOHN BIGELOW (1817–1911), who at that time was U.S. Ambassador to France (see BIGELOW 1909). He later wrote the eight-volume biography of BENJAMIN FRANKLIN.

¹⁰⁰ See the backside of the front-cover of the "National Bee Journal", January 1874, in which M.A. & M.F. TUPPER advertised Houdan chicken for sale.

¹⁰¹ SUSAN B. ANTHONY (1820–1906) and ELIZABETH CADY STANTON (1815–1902) were probably the two most prominent suffragettes of their time. For nearly half a century they lectured at hundreds of meetings, conferences and on political platforms, where their paths crossed several times with that of ELLEN S. TUPPER and those of her daughters. In 1868 SUSAN B. ANTHONY and ELIZABETH CADY STANTON established the "Revolution", which was one of the most important suffragette magazines (BAKER 2006). In regard of influence the "Revolution" was a success, but financially it nearly ruined the two female activists. In 1870 ANTHONY and STANTON had to sell the journal to LAURA CURTIS BULLARD (1831–1912). LAURA CURTIS BULLARD had grown up as a child in ELLEN and ALLEN TUPPER's hometowns Calais and Bangor in Maine. Her father JEREMIAH CURTIS (KOHN 2004; BULLARD & KOHN 2010) was one of the business partners of ELLEN's father and probably the owner of the ship that had brought the leaded sugar to Calais. During the 1840s and 1850s he had established a highly profitable business venture in selling "Mrs. Winslow's Soothing Syrup", which made him a millionaire (ANONYMOUS 1869e; KNOWLTON 1875). The sweetened medicine had been originally developed by one of the local housewives of Calais in 1835 (ANONYMOUS 1860e; HOOLIHAN 2008). LAURA CURTIS BULLARD, who had made herself a name as a female author, soon became involved in the family business. When she became editor of the "Revolution" the magazine changed to less confrontational style. The "Revolution" though remained a successful outlet for the suffragette movement, but it also became a promotional platform for the soothing syrup. Practically every issue included large advertisements for the product, which was meant to quiet restless infants and small children especially during teething. The soothing syrup however had a dark secret. It contained comparable large amounts of morphine sulphate and alcohol (PRITCHARD 1908; HOOLIHAN 2008; BAUSE 2012). In the late 19th and early 20th century "Mrs Winslow's Soothing Syrup" thus slowly gained a bad reputation (GEE 1870; MCNUTT 1872; GIBBONS 1874; ANONYMOUS 1906a, 1908, 1910; PRITCHARD 1908). The "American Medical Association" harshly criticized the nostrum (ANONYMOUS 1908) and several physicians in the United States and Great Britain made the product responsible for the death of thousands of infants (GEE 1870; PRITCHARD 1908; ANONYMOUS 1908, 1910). Nonetheless the Soothing Syrup, with changing composition of ingredients, was sold for nearly a century and already in the 1860s more than one million bottles were produced every year. Its factory in New York was proudly presented as a working place for many women (ANONYMOUS 1867d–e) and the little infomercial brochure ("Mrs. Winslow's Domestic Receipt Book"), sold together with the syrup, was one of the print products with the highest circulation number in the 19th century in America. The number of copies reached more than a million annual exemplars in 1867 (see ANONYMOUS 1867d).

For detailed biographies on SUSAN B. ANTHONY, ELIZABETH CADY STANTON and LAURA CURTIS BULLARD see: DORR 1928; GINZBERG 2009; HARPER 1898a–c; KOHN (2004); STANTON (1998); STANTON ET AL. (1881); STANTON & BLATCH (1922); WARD ET AL. (1999).

¹⁰² For an alternative description on the early beginnings of the "Iowa Italian Bee Company" see Appendix 2.

¹⁰³ Honey bees in America: The honey bee was introduced by the early English and Spanish settlers that came to the new continent before 1625 (OERTEL 1980; PELLETT 1938). Some swarms soon escaped, but honey bees in the 18th century were still not common in many parts of North America. This is vividly illustrated by an anecdote that was widely reported during the 18th and 19th century originating from a report made by U.S. President THOMAS JEFFERSON (1743–1826). Accordingly, the Indians at that time did not have a name for the honey bee and instead called them the “*white man’s fly*” and they reportedly knew they were close to the settlement of the when they noticed gathering bees (JEFFERSON 1854, p. 319; see also GERSTAKER 1866; PFLAUME 1866, pp. 185; WIED 1839, p. 180; TEMPLE 1873). Until 1860 practically all imported honey bees seem to have been based on the European black bee (*Apis mellifera mellifera* L.) (QUINBY 1879, pp. 39; OERTEL 1980). There are only a few mentions of other bee species accidentally introduced from Europe, Africa and South America before that time. Encouraged by reports from Germany the U.S. government assisted in the import of a small number of Italian bees to North America (BENTON 1908; PELLETT 1938; STRANGE 2001). ELLEN S. TUPPER alone received Italian queen bees from at least three different importers. From then on, several attempts were made to introduce other bee species from Europe. For this reasons Italian bees have strongly influenced the honey bee population in the United States. From the 1880s to 1922 queen bees were shipped in large numbers from Europe to America (OERTEL 1980). This procedure only stopped when a new law was passed to prohibit further imports (ibid.).

¹⁰⁴ There is no comprehensive overview of the lectures ELLEN S. TUPPER gave during those years. However, it is certain that she presented her bee research on a national scale. In August 1870 for example she held lectured in Council Bluffs and Fairfield (see ANONYMOUS 1870c). During those trips she also made the personal acquaintance of many of the most noted entomologists of her time, such as for example CHARLES VALENTINE RILEY (1843–1895), who in 1868 established “The American Entomologist” and later convinced the U.S. government to establish a “United States Entomological Commission” (SMITH & SMITH 1996). Like ELLEN S. TUPPER, RILEY also had worked for the “Prairie Farmer” to gain national prominence (ibid.).

¹⁰⁵ JOHANN DZIERZON (1811–1906), also known as the Silesian Bee Father (German: Schlesische Bienenvater) was a priest from Lowkowitz, who became the most prominent researcher of bees in Europe during the 19th century. He was the first to introduce a moveable-comb beehive in 1838. As a scientist his most important discovery was parthenogenesis in bees with drones developing from unfertilized eggs, whereas queens and worker bees developed from fertilized eggs. In 1853 he was the first to introduce Italian bees into German apiculture. His crossing experiments were the first to provide a numerical hereditary ratio in animals in a paper which might have influenced GREGOR MENDEL’s later crossing experiments. For details on the life of JOHANN DZIERZON see VOGEL 1870; WITZGALL 1884; WITZGALL & FELGENTREU 1889; MÜLLEROTT 1959; CHMIELEWSKI 2006.

¹⁰⁶ ANDREAS SCHMIDT (1816-1881) was a German teacher who as a young boy was introduced to beekeeping. In 1844 he established a German bee magazine (“Eichstätter Bienen-Zeitung”), which he edited for more than a quarter of a century. Gaining support from other well renowned beekeepers he soon turned the magazine into the best and most widely circulating continental European bee journal. For details on the life of ANDREAS SCHMIDT see GRAVENHORST 1887b.

¹⁰⁷ See: The National Bee Journal, 1st January 1872, p. 1.

¹⁰⁸ WILLIAM FLETCHER CLARKE (1824–1902) was a congregational minister, journalist and publisher in Canada. In 1863 he had started to write small articles on agriculture under a pseudonym (LINDENBANK) in “Montreal Witness”, and a year later he became the editor in chief of the “Canada Farmer” published by the “Toronto Globe”. This publication at the time was controversial, because Clarke tried to promote progressive farming techniques. He later became editor of the “American Bee Journal” and president of the “North American Bee-keepers’ Society”.

¹⁰⁹ See: The National Bee Journal, 1st January 1872, p. 1.

¹¹⁰ See the “Constitution of the North American Bee Keeper’s Society 1871”, Art. 5, published in “Transactions of the North American Bee Keepers’ Society at their First Annual Session, 6th–8th December 1871, held at the City of Cleveland, published at Indianapolis, Indiana”, p. 3 (ANONYMOUS 1872g).

¹¹¹ *ibid.*

¹¹² The women that had joined the society included 1.) MRS. E. R. BENTON [Cleveland, Ohio]; 2.) MRS. H. H. BARNES [Albion, Michigan]; 3.) RACHEL CULLUM [Meadville, Pennsylvania]; 4.) MISS O. CAMP [Cayahoga Falls, Ohio]; 5.) MISS M. CONNOVER [Seven Mile, Ohio]; 6.) MRS. A. J. CAMERON [Lawrence, Kansas]; 7.) MRS. ADDIE M. DAY [Cleveland, Ohio]; 8.) MRS. FISK [Brookly Village, Ohio]; 9.) MRS. HARRIET A. FANNAM [South Bend, Indiana]; 10.) MRS. L. GAYTON [Cleveland, Ohio]; 11.) MISS LIZZIE GARDNER [Russelville, Kentucky]; 12.) MARY A. GRISSINGER [Carlisle, Pennsylvania]; 13.) EMMA T. GILLAM [Shreve, Ohio]; 14.) MRS. LUCINDA HARBISON [Corsica, Ohio]; 15.) MRS. E. S. HUNT [Cleveland, Ohio]; 16.) MRS. A. C. HATCH [Houlton, Maine]; 17.) MRS. M. M. HOLBROOK [Geneva, Kansas]; 18.) MRS. M. A. JOHNSON [Crittenden, Franklin County, Illinois]; 19.) MISS HELEN KNEISHERN [St. Johnsville, New York]; 20.) ANNIE LARCH [Ashland, Boone county, Missouri]; 21.) MRS. H. D. MINOR [Glenville, New York]; 22.) MRS. TEMPIE MCNAIR [Willow Hill, Illinois]; 23.) MISS MIRIAM NUNN [Cleveland, Ohio]; 24.) MISS FANNIE L. NORRIS [Shelby Springs, Shelby County, Alabama]; 25.) MISS NECY K. PEDEN [Mitchellville Sta., Sumner County, Tennessee]; 26.) MRS. F. I. PALMER [Hart, Michigan]; 27.) MRS. JAMES PATTERSON [Medo, Minnesota]; 28.) MISS C. S. ROGERS [Elmwood, Peoria County, Illinois]; 29.) MRS. ANNA SAVERY [Des Moines, Iowa]; 30.) MRS. E. S. TUPPER [Brighton, Iowa]; 31.) MISS MARY A. S. WOODS [St. Paris, Ohio]; 32.) ELIZABETH WEIDLER [Ashland, Ohio].

¹¹³ ELLA DUNLAP [RISSER] (born 1851) was a teacher and apiarian from Illinois and the daughter of MATTHIAS LANE DUNLAP and EMILINE PIERCE DUNLAP (1818–1907). She spent her childhood at the family farm that was then called “Rural Home”. Even at a young age she became interested in agriculture and bee-keeping. At the age of 15 for example she showcased plums, cherries, gooseberries and other fruits, she had been canned herself (ANONYMOUS 1866a). In the late 1860s she became the first woman to be admitted as a “*test case*” to the University of Illinois. Simultaneously she started a career as a teacher in the Public Schools of Sharpsburg in 1869. At the time of the here events given here in 1871, she had established herself as an independent beekeeper. Her apiary then comprised 90 stands of bees (ANONYMOUS 1871e). Bees, as a matter of fact, were her favourite topic of conversation. For example, when the “*Illinois Press Association*” met a year later, it spent a “*delightful afternoon*” on the farm of her father, who then was a correspondent of the “*Chicago Tribune*” (ANONYMOUS 1872c, p. 4). ELLA DUNLAP, on request, gave an illustration of the mode of handling bees in movable comb hives and remarked on the habits of bees (ANONYMOUS 1872d). The Reports of the meeting were full of praise for the young lady and her profession: “*The enjoyment here was vastly enhanced by Miss Ella Dunlap, daughter of the host, who discoursed upon her favorites, the bees, with all the fervor and learning of an accomplished professor, to which she added the irresistible charm of her modest demeanor*” (ANONYMOUS 1872c, p. 4.). In the period from 1871 to 1873 she was a frequent contributor to the “*Chicago Tribune*”, writing about bees, their management and their history (see for example DUNLAP 1871a–I; DUNLAP 1872a–q; DUNLAP 1873a–d). During this short period, she was one of the most productive female entomologists. She also published in the Weekly edition of the “*Chicago Tribune*”, but many of her articles there do not seem to have survived. In July 1874 she married CHARLES HENRY RISSER (1852–1930) (BARBOUR 1910). Having moved to Kankakee she apparently never published on bee-keeping again.

¹¹⁴ The Faculty (The Board of Instructions) around 1873 comprised 18 members, four members of the faculty were women (ANONYMOUS 1873e): MARY A LOVELACE was employed as “*Preceptress and Housekeeper*”, but de facto she was the “*Instructor in Mathematics*”. MARGARET P. MACDONALD was the College’s “*Matron*” and gave lessons in English Literature and French. MARY L. BARNES taught Music and gave piano lessons (*ibid.*). ELLEN S. TUPPER, not living on site, did not need to teach individual classes. Instead her presentations were held as evening lectures that were attended by the whole college (*ibid.*). Additionally, the College possessed its own beehive on the College Farm, which had been sponsored by her and she offered to give special instructions on the management of bees for those who were interested (*ibid.*). For that time the college had a comparable large percentage of female students (*ibid.*). Of the 263

students that were enrolled in 1873, 96 were women. While they shared many of the courses with their fellow classmates, the overall curriculum was different (ibid.).

¹¹⁵ For a more detailed discussion of the patent issue see the “American Bee Journal“, which devoted a large part of its January and April 1872 issues on the topic and dispute. In general HOMER A. KING had questioned the validity of the Langstroth bee-hive patent.

¹¹⁶ See the Editorial Board printed in the January 1873 issue of “The Bee-Keeper’s Magazine“, p. 68.

¹¹⁷ The article was a reprint of two earlier editions, which had appeared in London and New York in the “Tracts for Parochial Use” (Vol. 7) and in “The Evergreen”.

¹¹⁸ It is quite interesting to note that the printing office of the “Scientific American” in New York was located in the very same building where the suffragette magazine “The Revolution” was printed.

¹¹⁹ The extended editorial board that was printed in the first issue of 1873 was already dropped in the following issue in favour of adding a table with the subscription terms of the journal.

¹²⁰ CORNELIA ROYCE NEE SCHERMERHORN (1837–1917) from Illinois was the wife of PHILANDER CHASE ROYCE (1838–1907). Her husband originally worked as a grammar teacher, but later became an agent and then secretary of several fire insurance companies in Pennsylvania and later Connecticut (see “*Hartford Courant*“, 2nd December 1907, p. 11), which had business throughout the United States. The couple were active supporters of the “Woman’s Christian Association” (“*Hartford Courant*“, 4th December 1907, p. 7) and numerous other social societies. While her name appeared on the editorial board as “*Special Contributor*” in the first issue 1873, no specific article could be attributed to her by us.

¹²¹ JULIA ABIGAIL FLETCHER CARNEY (1823–1908) was an American poet and writer from Massachusetts. She worked for many of the early American journals such as the Boston “Trumpet“, the „Christian Freeman“, the „Lily of the Valley“, the „Rose of Sharon“ and the “Ladies’ Repository“ providing poems and verses (HANSON 1882). During her time she wrote under many different pen names, including „JULIA“, „REV. PETERS BENSONS’S DAUGHTER“, „MINNIE MAY“, „FRANK FISHER“, „SALLY SENSIBLE“, and „MINISTER’S WIFE“ (ibid.). After her marriage in 1849 she focussed chiefly on prose and wrote for the “Phrenological Journal“, “Science of Health” and “Midland Monthly” and the “Bee-Keepers’ Journal” (ibid.).

¹²² WILHELM BUSCH (1832-1908) was a German illustrator, humourist and poet. His most famous work are the illustrated adventures of “Max & Moritz”. His uncle was the German beekeeper and pastor GEORG KLEINE, whose letter had started the discussion on the purity of queen bees in December 1866. The comic strips used in the “Bee Keepers’ Magazine” were based on images from “*Buzz a Buzz*“, in German known under the Title “*Schnurrdiburr oder die Bienen*”.

¹²³ ANNIE SAVERY in the winter of 1872/1873 was on a visit in Washington D.C., where she was lobbying for women suffrage and attended the annual meeting of the „National Woman Suffrage Association“, which met there under the presiding rule of SUSAN B. ANTHONY. During the meeting ANNIE N. SAVERY, together with ELIZABETH CADY STANTON, BELVA A. LOCKWOOD (1830–1917), L.D. BLAKE and MATILDA JOSLYN GAGE (1826–1898), was announced as one of the members of the “Committee on resolutions”. At the same time, she was also acting as a correspondent for the State Register in Iowa reporting on political events in the capital. She left after the inauguration of ULYSSES GRANT and returned to Des Moines. It was probably a short time before her trip that her relationship with the Italian Bee Company was dissolved.

¹²⁴ MARTHA COONLEY CALLANAN (1826–1901) was one of the leading figures in the Iowa suffragette movement. After marrying JAMES C. CALLANAN (1826–1904) in 1846, the CALLANANS moved to Des Moines in 1863 (GUE 1903; MOTT 2009). Her husband soon became involved in many financial institutions in Des Moines, for example as a founder of the “Hawkeye Insurance Company“, president of the “Capital City Bank” and stakeholder of the “Citizen’s National and State Savings Bank”_(GUE 1903). In the 1870s the CALLANAN home became the unofficial headquarter of the woman suffrage movement in Iowa (MOTT 2009). MARTHA CALLANAN became the first president of the “Polk County Woman Suffrage Association” and later helped to charter the “Iowa Woman Suffrage Association” (IWSA) (MOTT 2009). Her husband was president of the IWSA in 1875, before he was succeeded by his wife (MOTT 2009). In 1886 she launched

the “Woman’s Standard” (MOTT 2009), which she maintained as a publisher until 1899. Both MARTHA CALLANAN and her husband were advocates of the temperance cause (GUE 1903).

¹²⁵ VICTORIA CLAFLIN WOODHULL (1838–1927) was the most controversial American suffragette and a spiritualist. She is best remembered today for being the first woman to have run for President of the United States. She was an advocate for “free love”, a motto which represented the freedom to marry and divorce without social restriction (NOUN 1969). At the early age of 15 she had married CANNING WOODHULL (1826–1872), an incompetent alcoholic and quack physician, with whom she had two children, and who advertised wonder cures in local Iowa newspapers (ANONYMOUS 1863a; TILTON 1871; NOUN 1969). Eleven years after her marriage, VICTORIA WOODHULL divorced her husband and soon afterwards, in 1866, she married Colonel JAMES HARVEY BLOOD (1833–1885), a Civil War veteran from Missouri, whom she met at a spiritualist conference (NOUN 1969; PIROK 2011). In 1868 WOODHULL, Colonel BLOOD and her sister TENNESSEE CLAFLIN (1844–1923) moved to New York, where the two sisters met railroad tycoon CORNELIUS VANDERBILT (1794–1877), who made VICTORIA WOODHULL his clairvoyant financial advisor, while he had an affair with her sister (NOUN 1969). With the help of VANDERBILT and the money from fortune-telling, in 1870, VICTORIA WOODHULL and her sister became the first female stockbrokers on Wall Street, thus causing with their firm “Woodhull, Claflin & Company” a quite unusual scandal (HAVELIN 2007). Money earned this way allowed them to establish their own newspaper, the “Woodhull, & Claflin Weekly”, which would eventually reach a claimed circulation of 27,500 copies. In 1871 Woodhull was able to testify on women’s suffrage before “House Judiciary Committee” in Washington, which brought her to universal attention of the suffragette movement and for a short time some of its leader such as SUSAN B. ANTHONY and ELIZABETH CADY STANTON recognized her as a new champion for the cause (NOUN 1969; NOUN & BOHLMANN 2002). Shortly after, in May 1872 she was officially nominated by the Equal Rights Party as their candidate for president. Around that time WOODHULL’s magazine published a scandalous article that became the talk of the decade. HENRY WARD BEECHER, the famous minister, had denounced WOODHULL’s “free love” doctrine in his sermons, yet V. WOODHULL had learned from ELIZABETH CADY STANTON that BEECHER’s wife was living in adultery herself, having an affair with THEODORE TILTON (NOUN 1969). When the magazine exposed Beecher, it caused a sheer shock in the media landscape (ANONYMOUS 1874w–x; NOUN 1969). In November WOODHULL, CLAFLIN and BLOOD were arrested for publishing and circulating such an obscene newspaper. The talk on the issue however would go on the newspapers for many years to come. Not surprisingly the story was also widely intensely covered in Iowa newspapers of the time and particularly caused a division in the Iowa suffragette movement (NOUN 1969; NOUN & BOHLMANN 2002). What is most likely much less known is that WOODHULL had a connection to Iowa before the 1870s. WOODHULL and BLOOD had spent some time in 1867 in Des Moines, where they introduced themselves as Dr. and Mrs. J.A. HARVEY (NOUN 1969). When they later returned in 1874 they were recognized as the couple who had left the city owing money to the Des Moines Register among others (ibid.).

¹²⁶ ELIZABETH M. BOYNTON HARBERT (1843–1925) was an American lecturer, author and reformer from Indiana. Her mother was ABIGAIL SWEETSER from Boston, who might have had been related to ELLEN S. TUPPER’s grandmother MARY SWEETSER SMITH. From their time in Houlton the TUPPER family was also very likely to be well acquainted with other members of the BOYNTON family, who had been in command of the military fort in their former hometown in Houlton, Maine. In the 1860s LIZZIE BOYNTON HARBERT had established herself as a successful book author. She was one of the young women in the late 1860s giving public lectures on women’s suffrage, for which she received threats. After a lecture in March 1869 for example she had received a package containing a pair of trousers, a jacket and a dull razor (See “The Cedar Falls Gazette, 12th March 1869, p. 4). During the time of the Suffrage Meeting in Des Moines in March 1873 she was hosting some of the most prominent American suffragettes such as MARY LIVERMORE, REV. AUGUSTA CHAPIN and HATTIE WALKER in her home (Daily Iowa State Register, 4th March 1873, p. 4). After joining the suffragette movement in Iowa, in the following years she became one of the leading suffragettes in Illinois, where she had moved with her husband. From 1876 to 1884 and then again from 1889 to 1890 and 1900 to 1901 she was the president of the “Illinois Suffrage Association” (BUECHLER 1987).

¹²⁷ THOMAS WENTWORTH HIGGINSON (1823–1911) was an American author and Unitarian minister. In the 1850s he became a leading abolitionist, while he also made the acquaintance of the suffragette LUCY

STONE. In the period afterwards, HIGGINSON became one of the most important male advocates of women's rights before the Civil War. Today predominantly remembered as a member of the "Secret Six" and Colonel of the first federally authorized black regiment during the Civil War (HIGGINSON 1870; LOOBY 2000), HIGGINSON continued his support for the women's suffrage, helping for example to organize the "New England Suffrage Association" in 1868 and the "American Women Suffrage Association" in 1869. When "The Woman's Journal" was established in 1870 he became its original editor and for many years he would continue to write articles for the journal (LOOBY 2000). During the years 1873 to 1874 HIGGINSON was in an intensive discourse on "*Sex and Education*" (HAMLIN 2014, p. 204).

¹²⁸ CYRUS C. CARPENTER (1829–1898) was an American politician and the 8th Governor of Iowa (1872–1876). From January 1876 to September 1877 he was appointed Second Comptroller of the Treasury of the United State. From 1879 to 1883 he was member of the United States Congress.

¹²⁹ Letter from C. C. CARPENTER et al., Des Moines, Iowa, to President GRANT, 19th March 1873, Applications files, RG 59 as cited in CALKIN 1978, p. 32 & 38.

¹³⁰ LIZZIE [ELIZABETH] C. BUNNELL READ (1834–1909) was a journalist, suffragette and temperance activist. Before the age of sixteen she had started a career as teacher in Indiana, but soon she had the opportunity to learn the printing business from scratch when she completed an apprenticeship and following foremanship in the printing office of a local weekly newspaper in Peru, Indiana (WILLARD & LIVERMORE 1893). From January 1861 onwards, she was editor and proprietor of the "Mayflower" (1861-1865), the only Woman's rights journal that continuously published during the American Civil War (CRAMER 2000; NOUN 1969). Printed in Peru it continued the tradition of AMELIA BLOOMER's magazine "Lily" (ibid.). In March 1863 she married DR. S.G.A. READ and after the war, in 1865, the couple relocated to Algona in Iowa (WILLARD & LIVERMORE 1893). There LIZZIE B. READ established the first regional newspaper, the "Upper Des Moines" (INGHAM 1922; DURANT 1950). Later in her life she became an associate editor of the suffragette magazine the "Woman's Standard" (NOUN 1969). She was vice-president of the "Indiana State Woman Suffrage Society", president of the "Iowa Woman Suffrage Association" (1874) (THOMAS 1874) and Recording Secretary of the "American Woman Suffrage Association" (ANONYMOUS 1874v).

¹³¹ The "New York Tribune" reported that the President had informed SAVERY that he could not "*approve of the idea of sending women abroad to represent this country, and that the duties of the office could not be properly performed by one of her sex*" (ANONYMOUS 1873l). ANNIE N. SAVERY was also an applicant for the positions of commissioner of agriculture and commissioner of Indian affairs (ibid.). One of the reasons why those applications have failed might simply originate from the fact that ANNIE N. SAVERY and several other influential suffragettes had not supported ULYSSES GRANT in the presidential election of 1872, but instead had voted and lobbied for his opponent HORACE GREELEY.

¹³² The anecdote presented is one of the very few known examples of women trying to actively vote in the United States in the late 1860s and early 1870s. The first woman known to cast any vote was KIZZIE ANDERSON (NOUN & BOHLMANN 2002, p. 39), later known as ORISSA KEZZIAH ANDERSON DORRANCE (died 1927). With the help of a friendly election board that also comprised her father, she was able to successfully cast a ballot for ULYSSES GRANT in the presidential election of 1868 (see "The Daily Times" (Davenport, Iowa), 26th May 1927; for comparison see also NOUN & BOHLMANN 2002). The most well-known example are SUSAN B. ANTHONY and 18 fellow suffragettes, who tried to vote in the presidential election of 1872 (MONROE 2002; ANONYMOUS 1874u). For this SUSAN B. ANTHONY was arrested and fined 100\$ for illegal voting (NOUN & BOHLMANN 2002; ANONYMOUS 1874u).

¹³³ See: Papers and Letters presented at the First Woman's Congress of the Association for the Advancement of Woman, October 1873, Mrs. WM. Ballard, Book and Job Printer, New York, 1874, p. [4].

¹³⁴ MARIA MITCHELL (1818-1889) was an American astronomer, who rose to stardom after she had discovered a comet and calculated its exact position (KOHLESTEDT 1987). For her discovery she received a prize from the King of Denmark (ibid.). Hundreds of newspaper articles in those years established her celebrity and made her a symbol of what women can achieve in science (ibid.). Her achievements had already been mentioned at the Seneca Fall's Women's Rights Convention in 1848 (ibid.). Her skills and

prominence allowed her to pursue a professional career as astronomer, at first at the U.S. Nautical Almanac Office. In 1865 she was appointed professor for astronomy at Vassar College, a position she held until shortly before her death (KOHLESTEDT 1978; 1987; KENDALL 1896). With her numerous scientific achievements, she was also the most important female role model in regard to opening scientific societies for women. She became the first elected female Fellow of the "American Academy of Arts and Sciences" (1848) and in 1850 woman in the "American Association for the Advancement of Science" (KENDALL 1896, KOHLSTEDT 1978).

¹³⁵ See: "The National Bee Journal", 1874, Jan., p. 25 quoting an article in the republican newspaper Chicago Inter-Ocean. No indication of such a review was found in a search of existing digitized copies of the Inter-Ocean from 1873 to 1874.

¹³⁶ THOMAS G. ORWIG (born 1834) was an editor, patent lawyer, and captain in the Civil War. After the civil war he moved to Des Moines where he opened a patent office and worked for various local newspapers. His wife was MARY E. ORWIG NEE SIPP. THOMAS ORWIG was the brother of REUBEN G. ORWIG, who was married to MARIA S. ORWIG. The latter couple were close neighbours of ANNIE SAVERY. MARIA S. ORWIG, for several decades, was the universal suffrage correspondent of the "State Register" in Des Moines and it is known that she and ANNIE SAVERY were friends (see NOUN & BOHLMANN 2002; PORTER 1898). The close relationship between her and A. N. SAVERY is emphasised by a letter of 1882 from MARIA S. ORWIG to AMELIA BLOOMER, who at the time was preparing an Iowa chapter for the history of the suffrage movement edited by STANTON and SUSAN B. ANTHONY (see NOUN & BOHLMANN 2002). In it MARIA S. ORWIG made it clear that "*she hoped Bloomer would do justice to Savery*" (NOUN & BOHLMANN 2002, p. 55). The correspondence also highlights the tense relationship between SAVERY and CALLANAN at the time: "*Mrs Savery worked nobly, and was treated shamefully. MONEY, not brains ... has carried Mrs. James Callanan to the very head of the movement*" (ibid.). REUBEN G. ORWIG and his wife played an important role in one of the major scandals in the Swamp Land sales directly after the Civil War. As a clerk for Iowa Governor STONE he had signed so many decrees that some of his critics had accused him of being the "*acting Governor*" (ANONYMOUS 1867, p. 2). In this context he was accused of having "*deceived and hoodwinked the Governor*" (ibid.). The highly complex case was extensively covered in the newspapers, and led to a major lawsuit then known as the "*Swamp Land Embezzlement Case*" (ibid.). At least part of the case would occupy different appeal courts for years. During the last months of the Civil War the case was also investigated in detail by an Investigation Committee, which tried to shed light on the case (HUNTER 1866). During this investigation not only REUBEN ORWIG and his wife were questioned, but also ANNIE SAVERY's husband J.C. SAVERY was called as witness, because as a Director at the "American Emigrant Company" responsible for the Washington connections of the company, he had business relations with ORWIG in his role as a private secretary of the governor (HUNTER 1866). As a matter of fact, the Savery House was a place where many of the events testified upon discussed in the report, took place (see HUNTER 1866).

¹³⁷ See the correspondence department in the National Bee Journal 1874, p. 123. There ELLEN S. TUPPER reprinted a letter from ORWIG, which she had received from JOSEPH MESSIMORE: „*SIR—I am collecting evidence I swindling operations carried out in the Queen Bee Trade. If you have been a victim, please give me particulars. I enclose you an advertisement of a person says: 'We have two hundred (200) choice queens to be sent to agents only.' Are you one of the agents? Respectfully, &c., Thomas G. Orwig.*"

To this ELLEN S. TUPPER replied: "*There were also enclosed copies of our new premium queen offer, and a libelous [sic], scandalous article, making grossly false charges, which was published a year ago in a little advertising sheet issued at semi-occasionally in this city by Mr. Orwig. (He omits in his letter to say that he was the author of the enclosed slip, so we give him due credit). This is only one of a number sent back to us of the same purport ; and, though we at first thought them unworthy of notice, we begin to think that, in justice to our patrons and friends, we may as well speak of it in the Journal ; at least, we shall save them the trouble of re-mailing any more to us. At home, where we are both well known, this course would be unnecessary. If the gentleman (?) has any grievance against us, it is that we could not see, as he did, the good points of hives he patented, or assisted in patenting. We are grateful to the friends who have put us on our guard against these attacks in the dark. If they, or others who have received similar letters without reporting them to us, have any doubts of our business integrity, they may easily satisfy themselves by inquiring of any business*

man, banker, postmaster, or editor of this city" (ibid.). The original publication of ORWIG that is mentioned in this reply does not seem to have survived.

¹³⁸ **"Drones and Queens: Editor of Register:** - *I am surprised to see in your issue of Sunday, the 17th inst., a card from Thomas G. Orwig in which he says I informed him that Mrs. E.S. Tupper has published a statement charging him with originating the story of her delivering wagon loads of empty bee hives and invoicing them as live colonies, &c.. This statement I am compelled to say I never made to Mr. Orwig or any other person., for I know nothing about any thing of the kind, not have I seen any thing of the kind in print. What I said, and all I said to Mr. Orwig was this: 'Have you seen Mrs. Tupper's last issue of National Bee Journal ?' He replied: 'No.' I said, 'She seems to be after you.' Mr Orwig wanted to know what she had published. I replied, 'You had better read it for yourself.' Yours, &c., J.M. Dorr"* (DORR 1874, p. 1).

¹³⁹ There were also curious developments at that time, which concerned ELLEN S. TUPPER. In August 1875 the proprietor of the "American Bee Journal" THOMAS G. NEWMAN reported that the "Register" in Des Moines had published an article by some "idiotic wise-acre", which reported that the name of ELLEN S. TUPPER did not appear as either editor or correspondent of the "American Bee Journal" any longer. Indeed, names had been dropped from the editorial front of the journal from the previous months onwards for editorial reasons (NEWMAN 1875a). Surprisingly, we were unable to locate any article of this content in the "Register".

¹⁴⁰ SEWALL SPAULDING FARWELL (1834–1909) was an American politician and soldier. During the Civil War he served as captain and later major in the Union army. After the war he became an Iowa State Senator (1865–1869). From 1869 to 1873 he then was an assessor of internal revenue (ANONYMOUS 1909). During the time of the episode presented he was promoted to collector of internal revenue, a position he held until 1881 (ANONYMOUS 1909). He also was elected member of the 47th Congress, where he served from 1881 to 1883 (ANONYMOUS 1909). In later years he was president of the "Monticello State Bank" (ANONYMOUS 1909).

¹⁴¹ NETTIE SANFORD (CHAPIN) (1830–1901) was one the early leaders of the Iowa women's suffrage movement. Having a keen interest in history she had started to give historical lectures on historical subjects in the late 1860s, such as MARY, Queen of Scots. In this capacity she also wrote several books on the history of her home county Marshalltown. By 1870 she had started to stage first discussion rounds on woman suffrage. Her views at that time predominantly reflected the views of the conservative members of the "Iowa Woman Suffrage Association" (NOUN & BOHLMANN 2002). Throughout the years, though, she lost much support, partially because she embraced the anti-prohibition position unpopular in the suffrage movement (ibid.). In 1876 she published a journal called "Ladies Bureau" for several months (ANONYMOUS 1878a). Later in 1888 she supported the idea of the candidacy of an Iowa woman for president (NOUN & BOHLMANN 2002).

¹⁴² JOHN HODGDON (1800–1883) was an American politician and farmer, whose family originated from the north of Maine. After studying law, he started a political career in the 1830s and became a member of the Executive Council of Maine, and then a Land Agent for the state. In 1846 he was elected senator of the State of Maine. In 1847 he became Senate president. In 1853 he relocated to Dubuque, Iowa, where he became mayor in 1859. From 1868 to 1874 he was president of the Board of Education and for many years involved in banking (OLDT & QUIGLEY 1911). Since ELLEN TUPPER'S father NOAH SMITH JR. was an influential Maine politician during the same period it seems likely, that TUPPER had already known HODGDON for a long time.

¹⁴³ The "Washington Press" in an article that survived indirectly reported that she had sold her Brighton farm of 135 acres to Rev. H.H. KELLOG of Guthrie for \$8,00 at "*a whale of a price*" (ANONYMOUS 1876q). According to the same report there had been two mortgages on the farm. One for \$1,000 and another for \$1,100. One was already released at that time and the second one was repaid in March 1876. However, official announcements in Brighton newspaper in the first 20 years of the 20th century indicate that the mortgages in the Brighton ledgers on her house and land were never written out in follow-up of these transactions.

¹⁴⁴ The curious name of Canton was chosen by its inhabitants, because it was believed that they were the antipodes of the Chinese city with the same name.

¹⁴⁵ JAMES CALLANAN (1820–1904) was a lawyer and businessman. As a real estate investor, he was business-partner of JAMES C. SAVERY (ANONYMOUS 1904). Their joined speculations with swamp land were highly lucrative and made both CALLANAN and SAVERY rich.

¹⁴⁶ LOUIS F. R. NOUN (1908–2002), who wrote an extensive biography of ANNIE SAVERY, believed that the latter was one of those friends that saved TUPPER from debt (NOUN & BOHLMANN 2002). However, this seems in the light of the newly found articles rather unlikely, but not impossible, as the CALLANANS and SAVERYS had for several decades intense business relations.

¹⁴⁷ HUGH M. MARTIN (1833–1882) from Tiffin, Ohio, was a lawyer, attorney and Democratic politician, who started to practice law in 1855. In 1856 he located to Marengo in Iowa county, where he established the law firm “MURPHY & MARTIN” (ANONYMOUS 1882c). A year later he was elected Prosecuting Attorney for the Iowa county district, an office which was shortly after abolished (ibid.). In 1862 he became an elected member of the Ninth General Assembly and the democrats nominated him as their candidate for the Forth congressional district (ibid.). This election during the American Civil War resulted in one of the first contested U.S. elections, because MARTIN had received the majority of the home vote, but nonetheless lost the district election to his opponent J.B. GRINNELL due to the soldiers' vote (ibid.). In 1867 his law firm relocated to Davenport, Iowa. From 1873 to 1881 he was elected city attorney (ibid.). Beside his work as a lawyer and attorney Hugh M. Martin was also a successful businessman, for example as a member of the “Iowa, Davenport, Glucose Company” (ANONYMOUS 1882c). In 1882 Martin died from an accident in the Rocky Mountains (ANONYMOUS 1882b; DOWNER 1910).

¹⁴⁸ While the article was written anonymously, the content of the recollection makes it very clear that the author had intimate knowledge of both the case and the proceedings of the trial. Even though dates had been messed up in the article, some of the details particularly those on specific witnesses and how the judge was substituted make it highly likely that it was written by either one of the attorneys or other members of the court. Some of the specific details of the proceedings of the trial had not been published before and would hardly have been retained in the memory of someone who had not been part of the trial himself.

¹⁴⁹ See for example the advertisement of the “Italian Bee Company” in “*Gleanings in Bee Culture*”, June 1876, p. 144.

¹⁵⁰ NORA ARCHIBALD SMITH (1859–1934) was the daughter of ELLEN S. TUPPER's brother ROBERT. She and her older sister KATE DOUGLAS WIGGIN (1856–1923) were successful authors of children's books. Many of them were published together. KATE D. WIGGIN's novel “Rebecca of Sunnybrook Farm” became the most popular of the two sisters' works. It was the basis for three screen adaptations under the same name (1917, 1932, 1938), the latter one starring SHIRLEY TEMPLE (1928–2014) was widely known.

¹⁵¹ Letter in “*Deutsche illustrierte Bienenzeitung*” 4(4), p. 128. The letter is weirdly dated 9./12. 86 and thus ahead of the article published by FRANZISKA GRAVENHORST.

¹⁵² Translated by the authors from the original editorial reply in the “*Deutsche illustrierte Bienenzeitung*”, 4(4), p. 128: “[...] *Besonderes Interesse hat es hier bei uns erregt, dass die dänische Frauen so gewandte Imkerinnen sind. Nun, auch in Deutschland giebt es dergleichen, allein in unserer Bekanntschaft mehrere, welche mit bestem Erfolg imkern. Warum sollte das auch nicht der Fall sein ? --*”.