

Craig Robertson and Deidre Lynch

PINNING AND PUNCHING: A PROVISIONAL HISTORY OF HOLES, PAPER, AND BOOKS¹

An Opening

To *perforate* is to pierce, to create a hole that goes right through. The hole that is at the centre of this essay is one that has been purposefully made to go right through the pages within books. These are the holes created by sewing implements such as straight pins and, starting in the late nineteenth century, by implements such as the hole punches, also known as perforators, used to prepare loose sheets for their assembly within binders. These holes create a connection between parts that is intended to be at once secure and provisional (like the perforations on a sheet of postage stamps, which both group the stamps and facilitate their separation). The holes that we study here, in being opened for the reception of metallic pins or binder rings, allow for not just attachment, but also for separation and reattachment, of parts to a whole. The manipulation of the pieces of metal that pass through the holes both allows objects to be attached to the surface of papers and allows papers to be bound into a book. It also permits these papers to be easily removed and, if necessary, to be reattached. The utility these holes have as ‘openings’ specifically is flagged by the language of the nineteenth-century patents for hole punches, which sometimes identify these devices as producing *apertures*, and not holes or perforations. Although nowadays *aperture* is most commonly associated with an opening in a lens which admits light, the term’s use in these patents derives from an older definition in which an opening serves to allow something to pass through.

We find that holes of this latter kind provide us—a media studies scholar concerned with the history of information storage, and an English Department-based scholar of nineteenth-century practices of book alteration and customization—with an opening too. Pinning together our research interests, we here conjoin some old books (ones with pins and pinholes in their pages) with the instruction manuals and the patents that told office workers at the end of the nineteenth century how exactly to use new kinds of books, ones that, thanks to the previous wielding of hole-punches, also had holes in their pages. Through our experiment in cross-disciplinary collaboration, we rethink how, in the long history of book use, books have functioned as storage devices more often than they have functioned as reading matter, and we use holes to challenge prevailing accounts both of the book and of its place in narratives of media shift.

The holes that interest us in this article help create specific places where objects or papers can be found. That is, sometimes through pinning and sometimes through punching, a sufficient quantity of paper is removed from a leaf to create a perforation; and that perforation is the means of creating the attachment that will give a new location to a note, a newspaper clipping, or a loose leaf in a (ring) binder. The absence creates presence.

The openness of these holes, we’ll suggest, reveals

how inadequate the usual conceptual protocols of our two disciplines are for understanding such storage functions. The familiar book historical opposition between *bound/unbound*, for instance, cannot take account of the temporary arrangements that holes sponsor. The attachment and access these holes enable produce a ‘provisional permanence’ that is occluded by many of our ways of talking about books as objects, as by, for instance, Western culture’s tendency to draw from the codex form a lexicon for thinking about finality and closure, completeness and integrity.

To think about provisionality is to see books as storage technologies that can be complete but not final. Books secure, but do not fix, objects. In certain over-familiar narratives of media evolution, the codex form stands for the rigidity that digital culture overcomes by making flexible what was formerly bound in. In such narratives the book wanted all along to be a searchable database. Or it wanted all along to be a box of shuffle-able index cards. Insisting on the continuities that link the pinned-in inserts that thicken a codex volume to the papers clasped within a loose-leaf binder, we instead offer a history of the book in which the book’s fate over the long term is to become what it was all along: a binder.

Some Papers of Pins

As an initial example of how we have been thinking about holes, paper, and books, consider, from the holdings of the Library Company of Philadelphia, a copy of a compilation titled *Amusements for the Young: Consisting of a Collection of Songs, adapted to the fancies and capacities of those of tender years*, compiled by a certain John Marchant, first published in London in 1751, reprinted in Boston in 1752, and identified in a handwritten inscription on its third page as the property of a certain ‘Salle Foster’ (that ascription is challenged thirty pages on, on the page where ‘Timothy Foster’ has inscribed *his* name). We first came across this book when studying an inventory, compiled by the Library Company’s chief of conservation, of books that had been repaired by their owners prior to the volumes’ arrival in the library. The two straight pins that are threaded through two of the pages of *Amusements for the Young* (both in part 1, entitled ‘Songs for little misses’) do indeed seem to have been supplied as a repair mechanism, meant to prevent this particular material book from coming apart at the seams. (At the eighteenth-century moment of its purchase *Amusements* was, however, already a flimsy thing, stitched and not bound, and in paper wrappers only, in an era when even the sturdiest children’s books were very often read to bits.) The two pins secure pages 3 through 10 in the volume (leaves A2–A5). With those two pins, someone has done damage to the integrity of the pages with the aim of preserving the integrity of the book. Though this act of mending did not, finally, prove sufficient to the task

(pages 11 and 12 were printed on a leaf [A6] that is now absent from this copy, having become completely unfastened), the creation of those four holes was clearly *supposed* to keep the book whole.

But one of those pins creates an additional effect. Salle Foster (we think it was her) has threaded one pin through the page that is dedicated to the text of Song IV, 'Miss and her Pins.' Arrive at this page, that is, and you not only read (or sing) about the pins that Miss means to use to adjust her cap, her kerchief and her hood and make herself fine. You see, and touch, a real pin. Salle has thus used it to create a wholeness of a second sort. On this page, putting together what has been sundered, textual representation has come to be united with the very object represented. The conceit of this page of collage is all the cleverer in as much as Salle has also returned the pin back to the paper-confined state in which pins and texts alike reached eighteenth-century consumers. As the third line of 'Miss and her Pins' mentions, pins were conventionally sold by their manufacturers threaded through a sheet of paper, and only afterward displaced from that paper surround and stuck into pincushions.

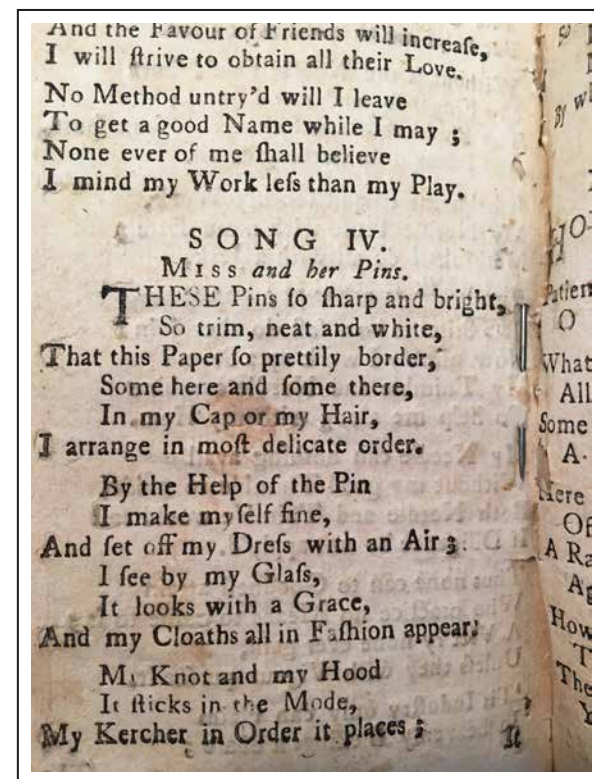


Fig. 1

Amusements for the Young states on its title page that the songs it compiles have been taken from the 'usual diversions and employments' of those of tender years. No wonder 'Miss' sings about pins. They were for centuries basic to domestic life, implements necessary to both the sewing and arranging of clothes (thus Lord Byron's quip that her pins made 'a woman like a porcupine, / Not rashly to be touched').² Pins were in almost equal measure components of the media environment of the past—basic to various practices of literacy, and in ways that through the nineteenth century linked the professional author to the child reader of a book like *Amusements for the Young*. In the course of learning to read and write the alphabet, a child might use the point of a pin to prick out the outlines of the letters on the pages held before her: a pedagogic method that suggests one of the reasons why paper surviving from prior centuries will often have holes in it.³ Through the nineteenth century, pins also formed part of the equipment that authors deployed in their acts of manuscript revision. (And not paper-clips or staples, both of which started to put in regular

appearances in desk drawers and office stationery cupboards only in the twentieth century.)⁴ Jane Austen, Frances Burney, and Herman Melville all made use of the shafts of pins to hold in place the patches inscribed with new text that they fastened atop their filled-up manuscript pages, thereby practising on paper the compositional techniques that we on our laptops will call cutting and pasting.⁵

However, our article's main point (pun intended) is that pinholes in pages are good to think with because, for a start, they are reminders of how much the history of book use comprehends *beyond* the textual practices of reading and writing. Pinholes in pages also register the extensive overlap between that history and the history of record-keeping. As Heather Wolfe and Peter Stallybrass advise, the holes found in papers from the sixteenth and seventeenth centuries are evidence that at some prior point in the existence of these sheets they were marked out for preservation and for filing in the older sense of the term. Thread, wire, tape, or string (all comprehended in the Latin *filum*) must have been pushed through those holes to keep together loose leaves of paper—receipts or family letters, for instance—and to facilitate the storage of those bundles on hooks or in bags or pigeon-holes. The perforations in a loose paper are the 'material signs' that this document was formerly attached to other, similar, and similarly preservation-worthy documents.⁶ But over time, Wolfe and Stallybrass state, the codex came to the fore as the platform of choice for such archiving.⁷

By means of a paper of pins, a printed volume can become a storage device—in ways that may variously complement or bracket the volume's intended role as reading matter, and in ways, too, that bring into being new, improvised composites of print and manuscript, and of printed book and print ephemera. One could, for instance, attach a newspaper clipping to the fly leaf of a book of verse—as in the copy of the first 1857 American edition of Elizabeth Barrett Browning's *Aurora Leigh* that was made complete and up-to-date with the addition atop the half-title of a newspaper printing of Browning's posthumous 1862 poem 'Mother and Poet'. Or one could attach a paper scrap containing a handwritten list of sundry pharmaceutical ingredients to the endpapers of a medical book: something someone did with a copy of an 1809 edition of Dr. Tissot's *Advice with Respect to Health*. The attachments at issue in such practices can also be affective. Sometimes the hole made in the page of a nineteenth-century book of verse has been purposefully formed to hold in place a botanical souvenir, a dried flower or a leaf memorialising perhaps a summer's morning in the reader's private past.



Fig. 2

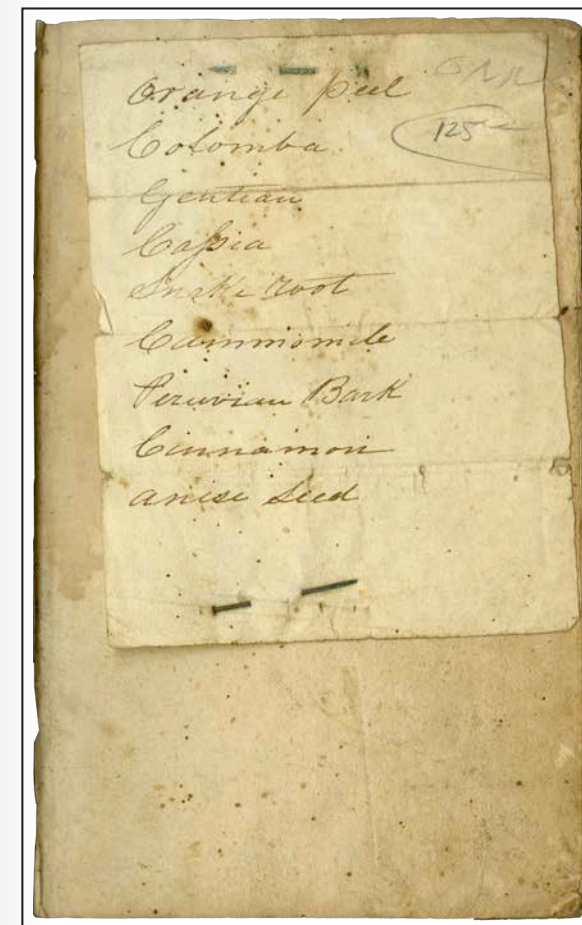


Fig. 3

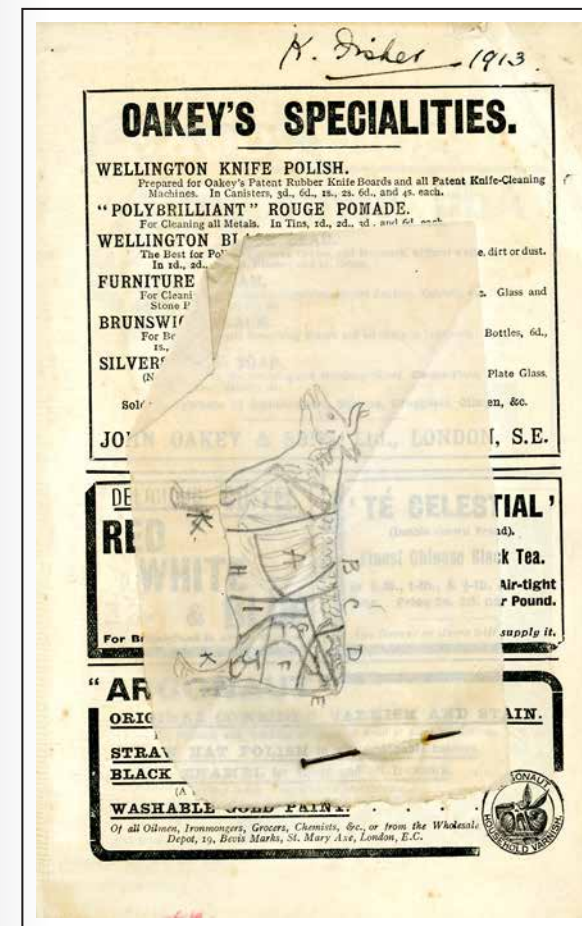


Fig. 4

Research by Stephen Colclough suggests that the pocket memorandum books that were hot sellers in the eighteenth-century English book market were especially accommodating of this practice of book-thickening.⁸ The handwritten additions that these print artifacts solicited with their generous provision of blank space made these books more personal and complete.

Pinned-in texts did the same, further assisting in transfiguring these printed books into customised compounds of calendars, diaries, and commonplace books. It makes sense, as well, that pinholes should often be discovered in examples of the manuscript book type that Margaret Ezell engaged when she described the many 'invisible' books that are not 'seen as books', and which are invisible in part because their motley, non-linear, hetero-chronic nature generally proves so exasperating for their would-be scholars.⁹ These are 'family books', to use the label eighteenth-century people sometimes gave them: books in which records of rents collected can be found jostling with poetic extracts, recipes, and alphabet exercises.¹⁰ These books model informal, improvised filing techniques that antedate the era of the filing cabinet, assisting both with a family's book-keeping and with its preservation of its keepsakes. (In this respect family books, just like family Bibles, inhabit the taxonomic grey area Jeffrey Todd Knight describes when he writes about early modern books being both 'objects for reading and writing' and 'objects for furnishing the home'.)¹¹ However, codex volumes of all sorts, manuscript and print, linear and non-linear, both books for reading through and books for writing into, have all performed those services. Andrew Stauffer has demonstrated, for instance, that in the nineteenth century that practice of inserting plucked flowers and leaves not just *onto* but also *into* the pages of books of verse (books whose lexical content itself tended toward the flowery) was so widespread that, in their book design, publishers both anticipated the practice and modelled it for their readers. In an 1885 Cassell edition of William Wordsworth's work, one page is printed with a trompe-l'oeil illustration (albeit in black and white), that makes it look as though a real pansy has been saved on it. The illustrator renders in an illusionistic idiom the perforations in the page and makes it look as though some one has scissored in those slits so as to permit this flower's stem to be threaded through the page's surface. On another page in this same edition, *trompe-l'oeil* pins are imaged. We are meant to think of these pinholes as having been made in the page for the express purpose of adding sketches of mountain landscapes atop it, in a position where they almost cover up Wordsworth's lines on Tintern Abbey, in fact, and we are meant to think that what we are seeing is not a pre-printed illustration, but a real reader's real, pinned-in insertions of her keepsakes.¹²

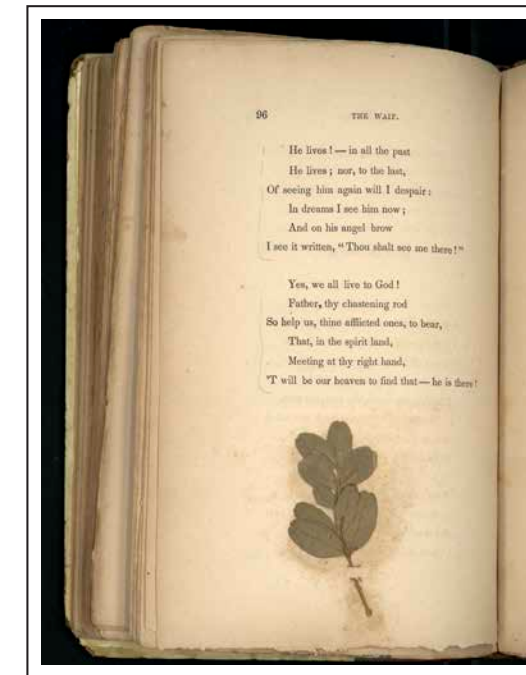


Fig. 5

Cut, Paste, Pin, Unpin

IN the examples of such nineteenth-century storage practices illustrated here so far, the absences (the holes) that pinning creates as it violates the integrity of the page have been used to create presence. They have been used to immobilise, that is, loose leaves (in both the papery and the botanical senses of the term), paper scraps, and newspaper clippings, in locations in which they can be found. The pinnings, in and on, reposition unbound, often ephemeral, non-book materials—not designed to endure—under the stabilizing, ordering dominion of the book. Consider in Figure 2 how, the better to facilitate its safe keeping, the inserted newspaper cutting can be folded up, accordian style, to conform to the dimensions of this copy of *Aurora Leigh*. The codex form transforms that scrap of newsprint by lending it protection—bestowing on it something of the book form's elongated shelf life and something of its cultural capital.

But in reminding us of the changes of state to which books in their turn are vulnerable, these accretions of inserted materials also push the codex form closer to the ephemera with which it is ordinarily contrasted. Because it suggests how the book 'contains within it the capacity for its constituent elements to become mobile again', a consideration of pinned-in/on materials can bring to the fore the potential looseness and dispersiveness of the gatherings from which all books, as books, are composed.¹³

Material pinned into the book can with little fuss be unpinned or repinned. If the attached material is detached once more, only a pair of nearly invisible pin pricks will testify to the modification the book once underwent. Pasting, by contrast, is hard to undo. (The nineteenth-century bibliophile who set out, with paste-pot in hand, to 'grangerize' a printed book and to amass between its covers a collection of materials chosen to illustrate its letterpress was committing, if only notionally, to an enduring attachment.)¹⁴ Assemblages of pinned-in materials can with ease be disassembled. This mode of book-thickening keeps books' contents flexible, ever up-date-able: the inserts remain on the verge of becoming 'mobile again' and so remain available, as well, to new combinations.

In their determination to interrogate Whiggish histories of media shift which posit a sharp divide between 'print culture' and 'digital culture', media historians have often gravitated to a language of 'cutting and pasting'. Borrowing from Apple what Apple borrowed from the tradition of manuscript book making, they have used that language to talk about the sophistication of information management systems that long antedate the searchable digital database and to point out that commonplacers, creators of note cabinets, assemblers of boxes of index cards, and many other compilers and note-takers realized long before Steve Jobs and Larry Tesler did the wisdom of maximizing the mobility and autonomy of textual units they amassed and grouped and regrouped together.¹⁵ But that language of cutting and pasting makes it harder to remember modes of book use that have associated the book with a storage practice that secures but does not fix objects.¹⁶ In pinning and unpinning, book history as a discipline might find an alternative conceptual framework for understanding these particular bookish storage functions, one better suited than 'cut and paste' to the task of recognizing provisionality—the medium term between permanence (the bound-in or the pasted-in) and impermanence (the loose leaf). To centre provisionality not only brings books into a history of storage, but it also brings the loose-leaf binder (an information technology) into the history of books.

Bound for the Office

IN the last decades of the nineteenth century more than one new type of book emerged in which storage was formally recognized as the object's *raison d'être*. Reminding her readers of the various wares, all linked by their plethora of not-quite-blank pages, that job printers marketed in these decades, Lisa Gitelman lists, for example, card albums, fern and moss albums, herbariums, flap memorandums (and so on, for a paragraph). A bookseller's catalogue from 1881 cited in the *Oxford English Dictionary* mentions 'guard books', blank volumes furnished with reinforcing slips—or guards—placed between their leaves, the better to prepare them for the reception of (as the OED explains) 'pasted scraps, invoices, newspaper cuttings, etc.': offices often used them to store pieces of correspondence received, deposited in chronological order.¹⁷

The book type critical to this part of our article, however, is one in which, from the get-go, holes were considered constituent components, and one in which the binding was rethought in order to create the storage conditions that would endow the contents with a sort of provisional permanence. Instead of providing in its pages a set of surfaces on which combinations of pins and holes could keep inserted materials in place, this book type relied on holes 'punched' into loose leaves to create openings for the pieces of metal shaped into rings or posts that were attached inside the book. What was provisional about the storage that this book type afforded was the manner in which, by means of these holes, it both bound in, but also made available for retrieval and relocation, its otherwise complete pages. We are talking about the *loose-leaf* or *ring binder* (in current North American English a *binder*). Its nineteenth-century inventors often explicitly understood and labelled the binder a 'book'—but it was a book that had been purpose-built to retain the looseness of unbound paper while ensuring loose paper could be securely stored within the enclosure of a book. That is, a loose-leaf binder maintained at once the looseness of a sheet of paper and the integrity of a book. It both enhanced and formalized the book's capacity as a storage technology.

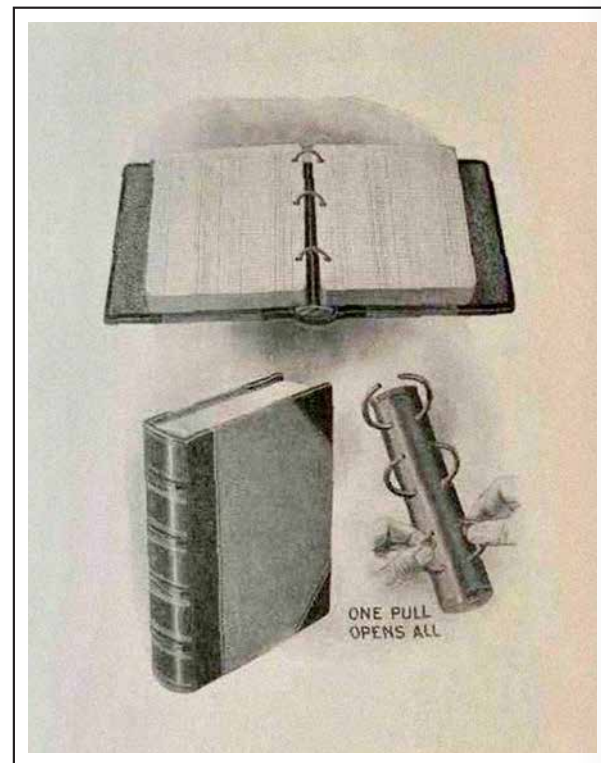


Fig.6

In turning to loose-leaf binders, our focus shifts not only to the office but also to the explicitly codified knowledge practices that defined the modern office, very different from the informal, tacit knowledge of book use that created, and was applied to, 'family books' in the domestic sphere. Office manuals (and the patents that explain the workings of new inventions with almost comic explicitness) promoted and imagined a space in which the general work of the (male) clerk was divided into specific tasks to be performed by women, who now used new technologies such as hole punches, binders, filing cabinets and typewriters. These manuals epitomize how, in turning from pinned-in paper to hole-punched paper, our account of the history of bookish holes during the long nineteenth century turns to a different kind of evidential archive. Rather than being inferred from what is left (as a practice of pinning has to be), the punching of holes into paper can be explained by the 'usage scenarios'¹⁸ that precede the activity. Although we argue that the intentionally created holes in these books share similar purposes, the contrast between our respective archives underscores the difference between binders' uses within the modern office, a site devoted to the standardization of practices, and the improvised, untheorised doings with pins and paper that preceded the invention of the binder by centuries and continued on unabated afterward. Practices that had to do with filing kept migrating into people's reading lives and their reading lives kept migrating into their record-keeping.

Loose Leaves, Binding Holes

THE loose-leaf binder emerged because offices needed 'a book with which it is possible to add leaves exactly where they are required'.¹⁹ The desire for this exactness came from the gradual coalescing of ideas labelled 'efficiency' and from the arrival of 'saving time' as one of modernity's defining problems. Efficiency entered the office under the aegis of the new profession of management, which had its roots in engineering, and whose basic m.o. was to break things into small parts to make them easier to control, for example, labour and time.²⁰ In an office environment that approached time as something to be saved, a bound book, with its contents in a state of inflexible lockdown, came to be represented as a problem.²¹ Thanks to the binder, loose leaves, temporarily bound, could be stored to make access and retrieval easier. As Charles Sweetland described it in his self-published 1903 book, *The Science of Loose Leaf Book-Keeping and Accounting*, '[a] beautiful mosaic may be arranged, each piece dovetailing with its fellow, thus making a system which would be impossible to devise if bound books were used.'²²

The person credited with first using a binder as a ledger to record commercial accounts on loose leaves wrote that he 'wanted something to save me trouble'; that trouble was the 'laborious consultation of old ledgers.'²³ To be able to go to one place to find all the papers related to a particular client (or subject in other types of binders) saved time; the actual place in a binder could change but each client's location in an alphabetically ordered system remained fixed. In the name of standardization, using a binder to organize accounts simplified the process of retrieval as it enabled individual accounts to be extracted from the continuity of the calendar. Rather than recording all transactions on consecutive pages in a bound book as they occurred, the transactions for each account were recorded on a single ledger page under the name of the customer; linear time became a secondary mode of

organization. When the page was completed, another one was inserted to follow it in the ledger. When an account ended, it was removed from the current accounts: ('There is no dead weight in the current ledger').²⁴ As a book, the loose-leaf binder gave a collection of papers the quality of wholeness, along with the acknowledgement that any completeness was never permanent. A completeness that was provisional spoke to the potential growth and expansion expected in a business that followed the principles of efficiency.

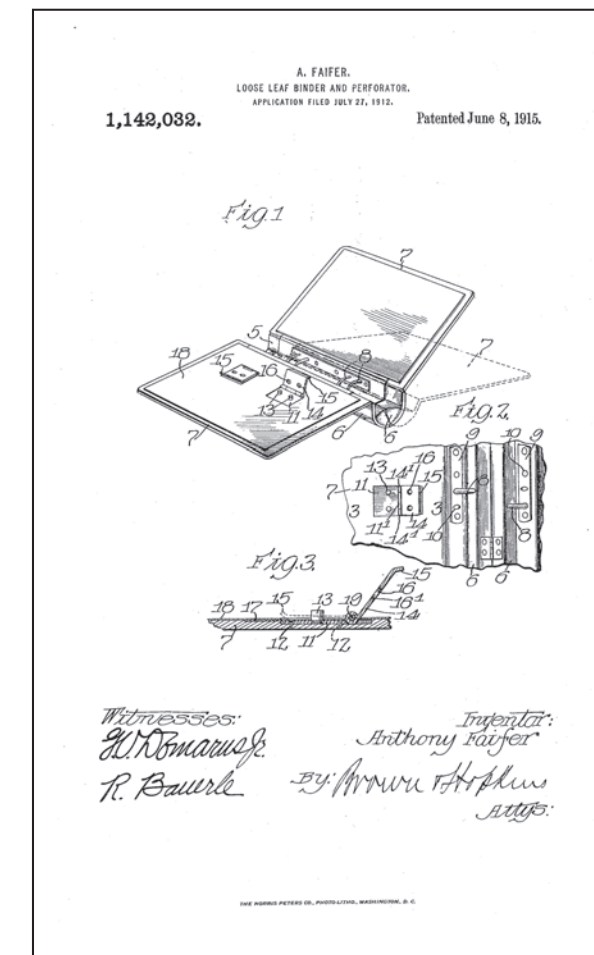


Fig.7

The ability to add and subtract pieces of paper or move them around in the book was critical to the perceived utility of the loose-leaf binder. Their fervent belief in innovation and progress meant that office equipment companies presented this affordance as a radical break with earlier practices. But one could on the contrary say that retrieval, relocation, and transfer have *always* numbered among the fundamental activities through which books have been made and remade and unmade. From the sixteenth century on, merchants who in their book-keeping were in the habit of transferring information from a day book or waste book to a more official ledger were pointed out as examples authors might want to emulate.²⁵ The library curator who, to prevent further damage to old paper, removes a pin to a bibliographical file (and then puts the pinned-in paper scrap or leaf material in a folder or envelope of its own) may simply be continuing what has already been a series of such acts of transfer. As another example of such transfer, consider how often, in her bibliographical description of the Samuel Taylor Coleridge notebooks, Kathleen Coburn traces the wanderings of detached leaves: a straight pin, now stuck into notebook number 2, from 1798 (BM Add MS 47498), appears, for instance, to have been used to add to that notebook a leaf originally positioned in notebook 28, which Coleridge kept decades later (1819–22).²⁶

When he explains how the index card was cham-

pioned in the early twentieth-century German business world, Markus Krajewski notes that its advocates presented books as the enemy to be displaced, on the grounds that 'a book cannot ever provide loose and insertion-friendly arrangements in alphabetical order; glue holds together those things that, according to the dictates of time, belong together.'²⁷ However, as we are arguing, a book can indeed serve as a locus for 'loose and insertion-friendly' arrangements, if one posits an alternative narrative of media evolution and, thinking on pinning and repinning, imagines that the future that awaited the book was one in which it was revealed to have been a binder all along. From this perspective, the provisionality of the position assigned to any one index card inside a file box or to any one paper slip inside a note cabinet can be reconsidered. It does not so much mark a break with the book as realize a possibility that was always also housed within the book, a possibility even more fully realized in the loose-leaf binder.

Nonetheless, at the beginning of the twentieth century, advocates of the loose-leaf binder made it more difficult to remember or apprehend these possibilities and continuities. Instead, they elected to contrast rather than connect their new invention with the traditional book form, what they called (damningly) a 'tight-bound book' with 'stationary leaves'.²⁸



Fig. 8

They championed their new book type as something as necessary to any modern office as a typewriter: another piece of office equipment designed for ease of use and efficient operation. A loose-leaf binder was 'self-indexing' because its index was part of the binder. The index, the alphabetical dividers, provided a place for the physical piece of paper; there was no need to consult an external card index to find a client's transaction. Furthermore, as Cornelia Vismann argues, in its construction a binder 'mechanizes the paper world of the order of letters'.²⁹ It brings the machine into the book. To make alphabetical indexing mechanical, metal, in the form of spring-loaded rings or tubular pins (posts), was attached to the interior of the covers and spine of a book. In some designs a lever was placed inside a book to operate these different mech-

anisms. Sometimes the binding mechanism included a bar to compress papers within the enclosed space a book created.

In different ways these mechanisms made the process of binding part of the book. In this context binding no longer named the skilled work of a particular person, or a stage in the manufacture of the book. A binder had become a book. In this context, the book itself is the binding technology, and anyone can operate it. A book had become a binder, a self-binding technology that meant that binding no longer had to be outsourced. However, if paper was to be bound into this book there needed to be holes in the paper. It was the holes in a sheet of a paper that allowed loose paper to become a unit in a larger whole.

Punching Holes in Paper

A machine was required to create the type of holes needed to secure paper and give integrity to this book form. At least this was the claim made in patents and advertisements that sought to explain the value of a perforator (what today we call a hole punch)—invented in 1886, mimicking an earlier storage technique, the pushing of papers onto a metal spike, and developed in patents over the following decades. Without a perforator, the holes in paper would be 'ragged'.

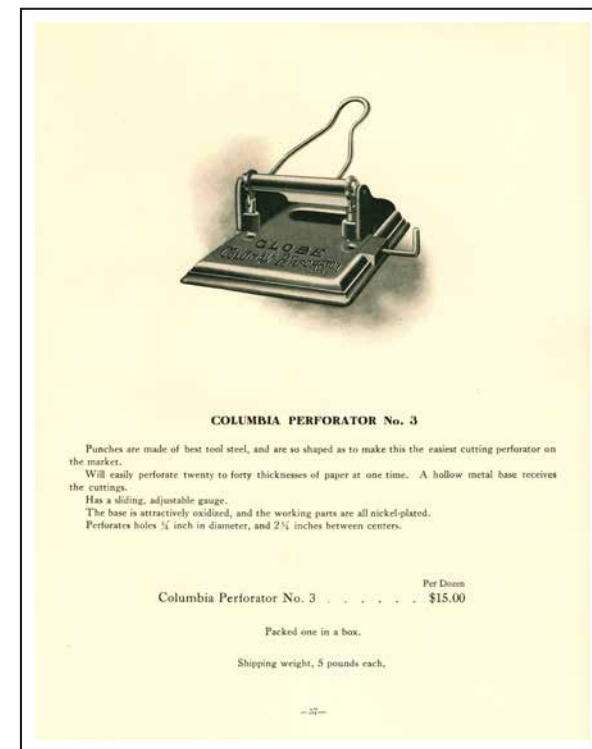


Fig. 9

The neatness a perforator promised applied not only to the perfect roundness of a hole but also to its placement. Using the binding mechanism to create a hole increased the chance that holes would be the correct distance apart to accommodate the binding, but it did not ensure they were an appropriate distance from the edge of the paper. Too close to the edge, and papers might easily 'tear away' from the loose-leaf binder. Inconsistent placement could also cause papers to lie unevenly in the binder. Therefore, in advertisements and patents, placement was identified as the problem that a perforator could solve. Its standardization could ensure that 'companion holes' were placed the correct distance apart.³⁰ As binder technology developed, 'adjustable perforators' were introduced to accommodate the holes that accompanied different binding needs.

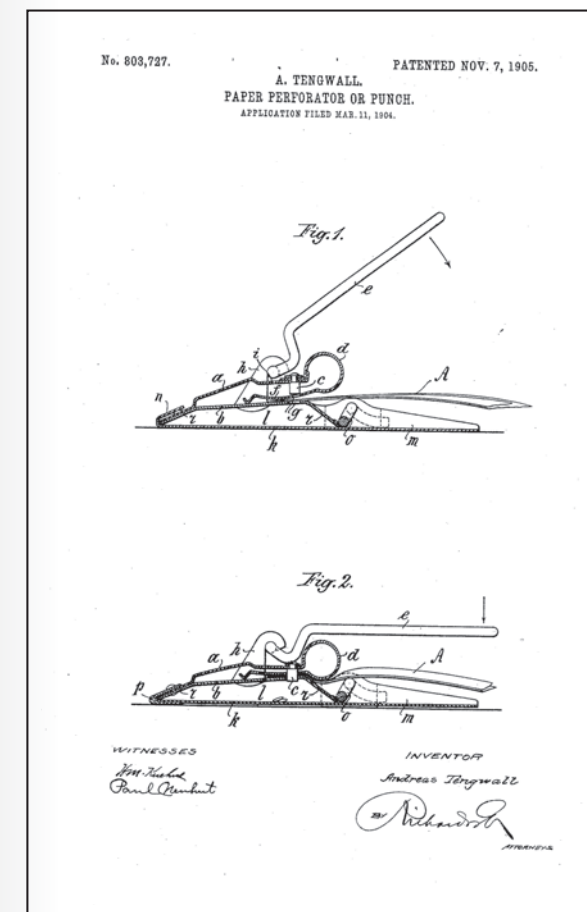


Fig. 10

At its simplest a perforator was a machine with a lever that when pushed down would force pointed tubes (sometimes, called pins) through a sheet of paper to create circular holes. This machine created holes by 'punching'. This action got its name from the 'punch': a proper noun long used to identify a tool that cut out pieces of a particular shape. Etymology links 'punch' to multiple meanings: both 'straight or thrusting blow usually delivered with fist' and 'puncheon', a piercing tool, both derived from the Latin 'pungus', meaning fist. A punch was a component of a tool that could merely prick or pierce but could also perforate through repeated or sudden impact.³¹

In contrast to the prick of a pin, the punch, in making a hole, created a material residue—what one patent writer called 'severed disks'.³² A hollow base was added to perforators to ensure that the devices collected the loose paper they created.³³ Patents gave this residue numerous names emphasizing different aspects of its smallness, thinness, and roundness—disk, bit, chip—while the promotional literature that suggested that efficient office work required a perforator pluralized the residue, calling it 'clippings'.³⁴ In removing this small, flat, circular bit of paper, the punch created a hole that functioned as an opening. Inventors called it a hole, perforation, or an aperture. The latter term underlined its status as an opening enabling something to pass through, that something being the binding mechanism.

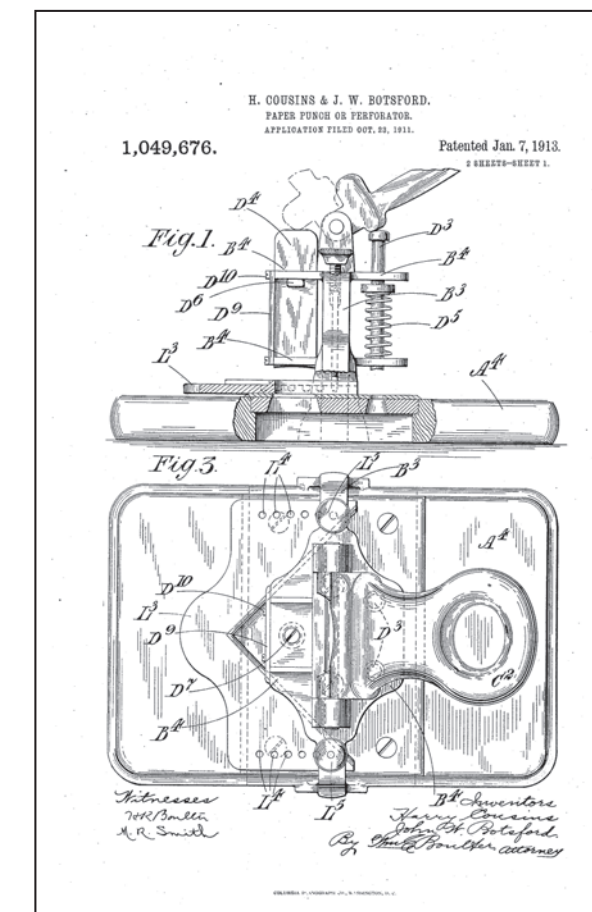


Fig. 11

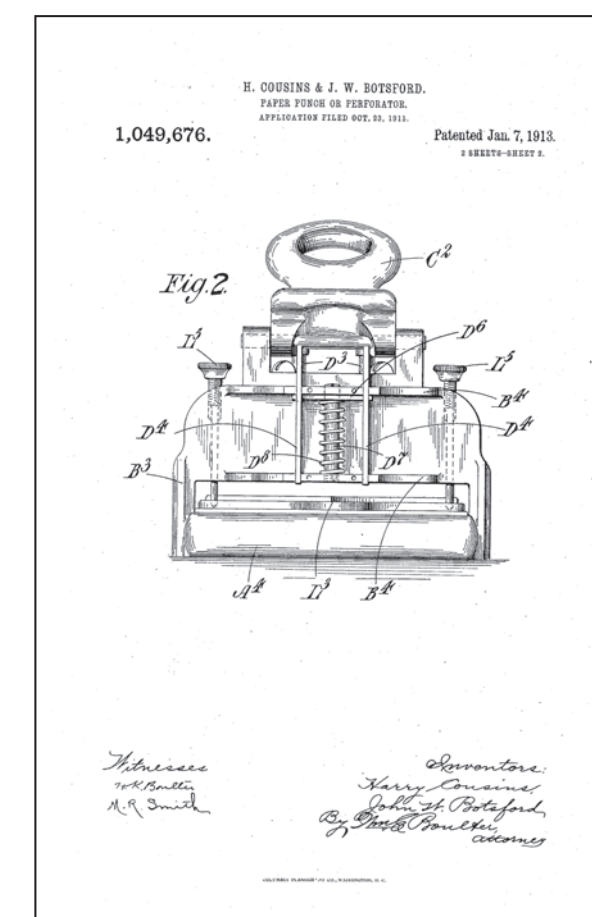


Fig. 12

These holes were not considered as creating damage to paper. Concerns about 'injuring paper' were directed to acts of carelessness or neglect, not intentional punching. On the contrary, these holes were viewed as contributing to the integrity of the book. The creation of the hole enabled a sheet of a paper to become a unit in a larger whole. It allowed loose paper to be immobilized. These holes were not cavities

or hollow places (unlike, say, the pigeonholes of other office filing systems), but they nonetheless created a location for papers within a classification system. In so doing they also created a position from which it was difficult for paper to escape, thereby turning a more figurative meaning of hole from a negative attribute to a positive one. The holes, working with the binding mechanism, were intended to help papers remain in place until they needed to be moved: 'letters, papers, and documents are to be perforated so that they can be found or filed.'³⁵

A Binding Decision (on Provisionality)

Intentionally-punched holes made paper open to attributes not always associated with bound paper: looseness, movement, flexibility. This became apparent in a series of court cases in the first half of the twentieth century that questioned whether using a loose-leaf binder as a ledger satisfied the evidentiary requirement that a ledger be a book of accounts.³⁶ The question the courts initially wrestled with was whether something was indeed a book if you could move papers around within it. The dimension of the book that pinning and punching foregrounded did not easily fit with the evidentiary authority that the courts gave to a *book* as a *book* of accounts. The courts initially associated a book with stability. A book was a bound volume, and through its permanent binding it stabilized accounts and secured their status as original.³⁷ In the same way that Herman Melville's use of pinning in his manuscript revisions could call into question which particular assemblage of the sheets, if any, represented the 'correct'/final version of his text, hole-punched loose-leaves similarly questioned established conventions about how to assess an 'original book of entry'.

Previous case law determined that to count as original a record had to be 'made at or about the time of the transaction', 'in the regular course of business'.³⁸ However, this record also had to be original in place as well as time, in that it had to be entered into the 'only book in which details were first collected together'.³⁹ This was a book 'capable of perpetuating a record of events'. Therefore, originality became inseparable from permanence: 'The verity which attaches to entries made in a book of account, in the regular course of business, is derived from the permanent nature of the record.'⁴⁰

Therefore, when it came to accounts, 'the character of books' made original entry and permanent records the foundation of truth.⁴¹ In the law's understanding of documentary evidence deemed admissible within the courtroom, permanence was linked to completeness. Established precedent determined that 'the whole must be taken together'.⁴² The significance that legal precedent granted to integrity meant that to withhold a part of a document raised concerns. In this context, the whole was the record of accounts of a business spread across multiple volumes. Although split into volumes, the permanent binding of the pages in each book provided integrity, in the sense of an undivided or unbroken state.

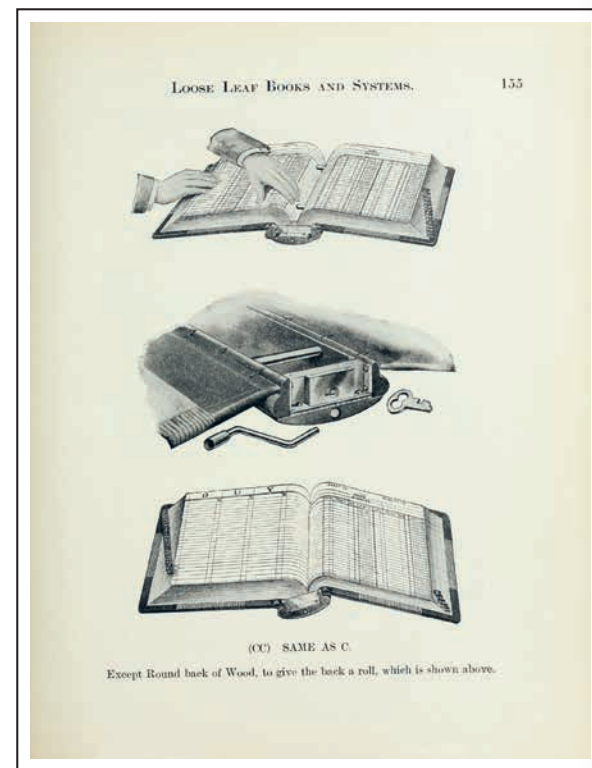


Fig. 13

The loose leaves in a ledger, with their punched holes, challenged this understanding of the integrity of a bound book, since a binder is a book facilitating the divisibility and the flexibility of its contents. In addition, this change in form brought to the fore a mode of critique that read into the form of a book the behavior of its user. In this way the loose-leaf ledger illustrated the extent to which legal reasoning had linked material wholeness and moral soundness, such that the former was interpreted as evidence of the latter. Not only did bound-in pages encourage a user to update records on a regular basis, but a book of accounts with a fixed binding would discipline a user so that he would not 'deliberately [...] contrive to mediate fraud against his neighbor'.⁴³ By contrast, loose paper invited the presumption of loose behavior. Unbound papers created the possibility that a person might 'in the heat of passion', create, alter, or destroy a record, by removing, adding, or altering paper.⁴⁴

By the 1920s, with many businesses using loose leaves for ledgers, courts in most states had decided that a loose-leaf ledger had sufficient integrity to be, legitimately, a book of accounts. In defining a book, the courts emphasized the intentional act of gathering papers into an enclosure. It was a book if loose-leaf papers were 'kept in sequence'.⁴⁵ The integrity associated with a bound book became in part a function of the use of the alphabet as the primary mode of order and of the calendar as the secondary mode. The system, not permanent binding, disciplined the user. However, a book also had to be an enclosure: 'sheets of accounts are so bound together in a folder or assembled in a cover with such degree of permanence that a book results.'⁴⁶ Although never clearly defined, the 'degree of permanence' did not include a staple in the corner attaching a dozen pages.⁴⁷ Permanence was linked to enclosure, redefining the book as an instrument for connecting papers. In defining a loose-leaf ledger as a book, the courts simultaneously and deliberately excluded notations on loose paper that existed 'independent of relation to any other sheet'.⁴⁸ To constitute a book, papers did not have to be permanently kept in one place, but they could not be permanently loose. In fact, no legal decision mentioned how the papers in a loose-leaf ledger were 'arranged' if they weren't 'stitched or bound together'. The holes

and the binding mechanism through which paper was attached to give a loose-leaf ledger the permanence that made it a book are completely ignored.

It is our argument that the courts, without exactly recognizing they were doing so, proposed provisional permanence as an important dimension of a book. For the courts, something existed between loose paper and bound pages, and that something was a loose-leaf binder in which 'the leaves of the books are not stitched or bound together but are arranged so that they can be taken out of the books, and the accounts of customers are kept on separate sheets'.⁴⁹ And with this argument that the binder really was a book the courts anticipated the line of twenty-first-century book historical thinking that increasingly insists that *the book* is not of a piece, is not self-contained, either conceptually or literally: Jason Scott-Warren's suggestion, for instance, that the book might best be viewed as 'an assemblage of strings and fastenings and filaments'.⁵⁰

Although more visible to the eye than pinpricks, the holes a perforator created did not, as we have mentioned, warrant explicit mention in court decisions. This absence apparently did not create a hole in the legal arguments, but it does speak to our argument about what happens when the absence created by pins and perforators is made visible. We have linked holes, paper, and books in two different nineteenth-century contexts to think about holes as present absences within the book, as openings in paper that are constitutive of the book. Unlike other perforations in paper, those created in books by pins and hole punches are not solely about facilitating separation. They are perforations that open a book up to temporary attachments; they enable attachment and, if necessary, reattachment. Agreeing with the legal reasoning, we argue the book is an enclosure, but that the attachment books sponsor varies in nature and duration. The round open spaces on paper made by pinning and punching determine 'the degree of permanence' by providing space for different binding mechanisms to pass through. The holes in our argument are intentionally made to articulate a refusal of the stabilization that has been central to some understandings of books and to open up the prospect that holes are materially important to a technological history of the pursuit of provisionality.

List of Figures

Fig. 1

This pin mends the page and at the same time illustrates its contents as well as augmenting it with metallic marginalia. 'Miss and her Pins' in *Amusements for the Young: Consisting of a Collection of Songs* (Boston, 1752). Library Company of Philadelphia.

Fig. 2

An update of the book: a newspaper clipping from 1862 pinned to the half title of a copy of the first American edition of Elizabeth Barrett Browning's *Aurora Leigh* (New York and Boston, 1857). Library Company of Philadelphia.

Fig. 3

The book as filing system: a list (of ingredients?) pin-ned to an endpaper in *Advice with Respect to Health, Extracted from Dr. Tissot* (Dublin, 1809). E. F. Smith Collection copy, Kislak Center, University of Pennsylvania.

Fig. 4

Diagram of butcher's meat, possibly drawn by Paul Child, pinned onto an endpaper in Julia Child's copy of *Mrs. Beeton's Cookery Book* (1912 edition). Schlesinger Library, Radcliffe Institute, Harvard University.

Fig. 5

A keepsake sprig is woven through the holes made in a page of *The Waif: A Collection of Poems*, ed. Henry Wadsworth Longfellow (Cambridge, Mass., 1845). Courtesy of Special Collections, University of Miami Libraries, Coral Gables, Florida.

Fig. 6

In the office, the ring binder promised to make it easy to add and extract loose leaves. *I-P Loose Leaf Books* (1907), p. 11. Smithsonian Archives and Libraries.

Fig. 7

Some binders included perforators as illustrated in this patent for a round-back binder (see fig. 3). Anthony Faifer, Loose-Leaf Binder and Perforator, U.S. Patent 1,142,032, filed July 27, 1912, and issued June 8, 1914, Google Patents.

Fig. 8

Binders introduced the mechanical into the book. The top image shows the binding mechanism in a 'screw and lever' loose-leaf ledger. William Risque, *Loose Leaf Books and Systems for General Business* (St. Louis, MO: R.P. Studley & Co., 1907), p. 150, Hathi Trust.

Fig. 9

Perforators quickly developed into a basic model made of steel with a hollow base to collect the residue cut from paper. Globe-Wernicke Co. *Catalogue of Stationers Supplies No. 609* (Cincinnati: Globe-Wernicke Co., 1909–10), p. 57. Courtesy of Hagley Museum and Library.

Fig. 10

Andreas Tengwell, a Swedish inventor, patented early loose-leaf files in Europe and the United States in the 1890s before developing double-punch perforators. Andreas Tengwell, Paper Perforator or Punch, U.S. Patent, 803, 727, filed March 11, 1904, and issued November 7, 1905. Google Patents.

Fig. 11 & Fig. 12

Inventors continued to 'improve' perforators. This patent is for a perforator 'adapted to make either rectangular or circular perforations at will.' Fig. 11 provides a side view and bird's eye view. Fig. 12 offers a front view. Harry Cousins and John Botsford, Paper Punch or Perforator, U.S. Patent, 1,049, 676, filed October 23, 1911, and issued January 7, 1913. Google Patents.

Fig. 13

A loose-leaf ledger, with locking mechanism introduced to counter concerns that binders lacked the integrity of a book. William Risque, *Loose Leaf Books and Systems for General Business* (St. Louis, MO: R.P. Studley & Co., 1907), p. 155, Hathi Trust.

1. We would like to thank Eric Dillalogue and Mitch Fraas (Kislak Center for Special Collections, Rare Books, and Manuscripts, University of Pennsylvania), Cornelia King, Jennifer Rosner, and Emily Smith (the Library Company of Philadelphia), Christine Jacobson, Leslie Morris, and John Overholt (Houghton Library, Harvard University), Peter Stallybrass, and Andrew Stauffer for their suggestions and assistance with this essay.

2. Lord Byron, *Don Juan*, ed. by T. G. Steffan, E. Steffan, and W. W. Pratt (London: Penguin Books, 1986), p. 279 (canto VI, stanza 62).

3. The Romantic poet Robert Southey remembered in his autobiography learning his letters through this method and finding that when the sheets—old playbills collected by his aunt—were held up to the window something beautiful had been created so that the sheets were 'bordered with spots of light'. Quoted in Gillian Russell, *The Ephemeral Eighteenth Century: Print, Sociability, and the Cultures of Collecting* (Cambridge University Press, 2020), p. 157.

4. On the various paper fasteners introduced at the end of the nineteenth century (including the paper clip, first patented in the United States in 1867), see <officemuseum.com/paper-clips.htm>. Sewing and writing were similarly aligned during writers' revision processes, as Jeffrey Todd Knight notes ('Needles and Pens: Sewing in Early English Books', *Journal of Medieval and Early Modern Studies* 45. 3 [2015], 523–42.) It can be difficult to differentiate the evidence that some paper has in the past been unstitched from the evidence that some paper has in the past been unpinned. But to stitch in a patch of text is to bestow more finality on the resulting composite than pinning does, since what is pinned may so easily be unpinned. We engage those acts of detachment later in this essay.

5. On the pins in Burney's and Austen's manuscripts, see Kathryn Sutherland, *Why Modern Manuscripts Matter* (Oxford University Press, forthcoming [2022]). On the pins attaching the leaves of Melville's manuscript of the posthumously published *Billy Budd* (and creating confusion for Melville's editors), see 'Foliation, Leaves, and Leaf Images', on the website *Melville Electronic Library: A Critical Archive*, <melville.electroniclibrary.org/foliation-leaves-and-leaf-images>.

6. Heather Wolfe and Peter Stallybrass, 'The Material Culture of Record-Keeping in Early Modern England', *Proceedings of the British Academy* 212 (2018), pp. 179–208.

7. Wolfe and Stallybrass, p. 191.

8. Stephen Colclough, 'Pocket Books and Portable Writing: The Pocket Memorandum Book in Eighteenth-Century England and Wales', *Yearbook of English Studies* 45 (2015), pp. 159–77. For pins and pinholes in these books, see p. 174.

9. See Margaret J. M. Ezell, 'Invisible Books', in *Producing the Eighteenth-Century Book: Writers and Publishers in England, 1650–1800*, ed. by Laura L. Runge and Pat Rogers (Newark, DE: University of Delaware Press, 2009), pp. 53–69, p. 55.

10. For this usage, see, e.g., William Oldys, *A Dissertation upon Pamphlets* (London, 1731), 9: 'Many good old Family-Books are descended to us, whose Backs and Sides our careful Grand-sires Buff'd, and Boss'd, and Boarded against the Teeth of Time, ore more devouring Ignorance, and whose Leaves they guarded with Brass, nay, Silver Clasps, against the Assaults of Worm and Weather.'

11. Jeffrey Todd Knight, "'Furnished" for Action: Renaissance Books as Furniture', *Book History* 12. 1 (2009), 37–63, p. 49. See also on books as boxes Lucy Razzall, 'Small Chests and Jointed Boxes: Material Texts and the Play of Resemblance in Early Modern Print,' *Book 2.0* 7. 1 (2017), 21–32.

12. Andrew M. Stauffer, *Book Traces: Nineteenth-Century Readers and the Future of the Library* (Philadelphia: University of Pennsylvania Press, 2021), pp. 64–66.

13. See Russell, *The Ephemeral Eighteenth Century*, p. 16; and see also Jacques Derrida, *Paper Machine*, trans. Rachel Bowlby (Stanford: Stanford University Press, 2005), p. 7.

14. On this practice of book-modification, named for what eighteenth-century readers did with their copies of James Granger's *Biographical History of England*, see Lucy Peltz, *Facing the Text: Extra-Illustration, Print Culture, and Society, 1769–1840* (San Marino, CA: Huntington Library Press, 2017); Luisa Calé, 'Remade', in *The Unfinished Book*, ed. by Alexandra Gillespie and Deidre Lynch (Oxford: Oxford University Press, 2021), pp. 370–83.

15. For the argument that cut-and-paste was the basic modus operandi of nineteenth-century print culture, see, e.g., Petra S. McGillen, *The Fontane Workshop: Manufacturing Realism in the Industrial Age of Print* (New York and London: Bloomsbury, 2019); and Anke te Heesen, 'News, Papers, Scissors: Clippings in the Sciences and Arts around 1900' in *Things that Talk*, ed. by Lorraine Daston (Cambridge, MA: Zone Books, 2004), pp. 297–327. Both draw on Ann Blair's account of early modern *compilatio*, *Too Much to Know: Managing Scholarly Information before the Modern Age* (New Haven: Yale University Press, 2010).

16. Granted, Blair does refer to the sixteenth-century bibliographer Conrad Gessner's use of a 'temporary glue' for attaching and grouping the paper slips on which his notes were written and compares them to our own post-it notes: see *Too Much to Know*, p. 96.

17. Lisa Gitelman, *Paper Knowledge: Toward a Media History of Documents* (Durham: Duke University Press, 2014), p. 21; *Oxford English Dictionary Online*, s.v. 'guard book', accessed 15 March 2021.

18. Delphine Gardey, 'Culture of Gender, and Culture of Technology: The Gendering of Things in France's Office Spaces between 1890 and 1930', in *Cultures of Technology and the Quest for Innovation*, ed. Helga Nowotny (New York: Berghahn Books, 2006), pp. 73–94 (p. 81).

19. Alex J. Vaughan, *Modern Bookbinding* (Leicester: Raithby, Lawrence & Co: 1929), p. 135.

20. Yehouda Shenhav, *Manufacturing Rationality: The Engineering Foundations of the Managerial Revolution* (New York: Oxford University Press, 1999).

21. Eventually in this context the individual sheet of paper became the base unit for the recording of business activities, a reframing of the record that was enabled by the development of the typewriter and of carbon paper. But the book reinvented as a binder continued to have a role in the storage of paper in offices, though by the early twentieth century the filing cabinet and index card cabinet would become the dominant places for storing paper. On these developments, see Craig Robertson, *The Filing Cabinet: A Vertical History of Information* (Minneapolis: University of Minnesota Press, 2021); Markus Krajewski, *Paper Machines: About Cards and Catalogs, 1548–1929* (Cambridge, MA: MIT Press, 2011).

22. Charles Sweetland, *The Science of Loose Leaf Book-Keeping and Accounting* (St. Louis: Chas. Sweetland, 1903), p. 2.

23. Herbert J. Stoeckel, 'The Loose-Leaf Ledger: Its Invention and Development', *Bookbinding and Book Production* (December 1939), 30.

24. William A. Vawter, 'Origin and Development of Loose Leaf', *Office Appliances* (May 1917), 17.

25. Blair, *Too Much to Know*, pp. 69–77.

26. Kathleen Coburn, ed., *The Notebooks of Samuel Taylor Coleridge*, Volume 1, 1794–1804 (rept. Abingdon and New York: Routledge, 2002), xxi–xxiii.

27. Krajewski, *Paper Machines*, p. 137.

28. John J. Uden, 'Loose Leaf Business Safeguard', *Office Appliances* (May 1917), 23; H.A. Prizer, 'Loose Leaf Leads in Modern Accounting', *Office Appliances* (May 1917), 24.

29. Cornelia Vismann, *Files: Law and Media Technology*, trans. Geoffrey Winthrop-Young (Stanford, CA: Stanford University Press, 2008), pp. 132–3.

30. Jeremie Tellier, Paper Punch, U.S. Patent 1,759,672, filed August 23, 1929 and issued May 20, 1930.

31. OED Online, s.v. 'punch', accessed April 1, 2021, <oed.com>.

32. Christopher C Boykin, Paper Punch or Perforator, U.S. Patent 760,303, filed February 1, 1904 and issued May 17, 1904.

33. Boykin, Paper Punch or Perforator.

34. Wernicke Co., *Store Furniture and Fixtures* (n.d.), 82, Smithsonian Libraries and Archives.

35. Erik L Krag, Perforator, U.S. Patent 926,261, filed June 28, 1906 and issued June 29, 1909.

36. Robertson, *The Filing Cabinet*, pp. 67–70.

37. Henry Campbell Black, *A Dictionary of Law: Containing Definitions of the Terms And Phrases of American And English Jurisprudence, Ancient And Modern* (St. Paul, Minn.: West Pub. Co., 1891), 146.

38. Wylie v. Bushnell, 277 Ill. 484 (1917); Lewis v. England, 14 Wyo. 128 (1905).

39. T. Barbour Brown & Co, v. Cauty, 115 Conn. 226 (1932).

40. Tabeta v. Murane, 76 Cal. App.2d 887 (1946).

41. Egan v. Bishop, 8 Cal. App.2d 119 (1935).

42. Larue v. Rowland, 7 Barb. 107 (1849).

43. William D. Seddon, 'What Constitutes a Book of Original Entry', *New Jersey Law Journal* 21 (1898), 106–109 (p. 107).

44. Seddon, p. 107.

45. Hawken v. Daley, 85 Conn. 16 (1911).

46. Foothill Ditch Co. v. Wallace Ranch Water Co., 25 Cal App.2d 555 (1938).

47. Tabeta v. Murane, 76 Cal. App.2d 887 (1946).

48. Hawken v. Daley, 85 Conn. 16 (1911).

49. United Grocery Co. v. J.M. Dannelly & Son, 93 S.C. 580 (1913).

50. Jason Scott-Warren, 'Ligatures of the Early Modern Book', *Book 2.0* 7. 1 (2017), 33–44, p. 34. See also Dennis Duncan and Adam Smyth, eds., *Book Parts* (Oxford: Oxford University Press, 2019).

