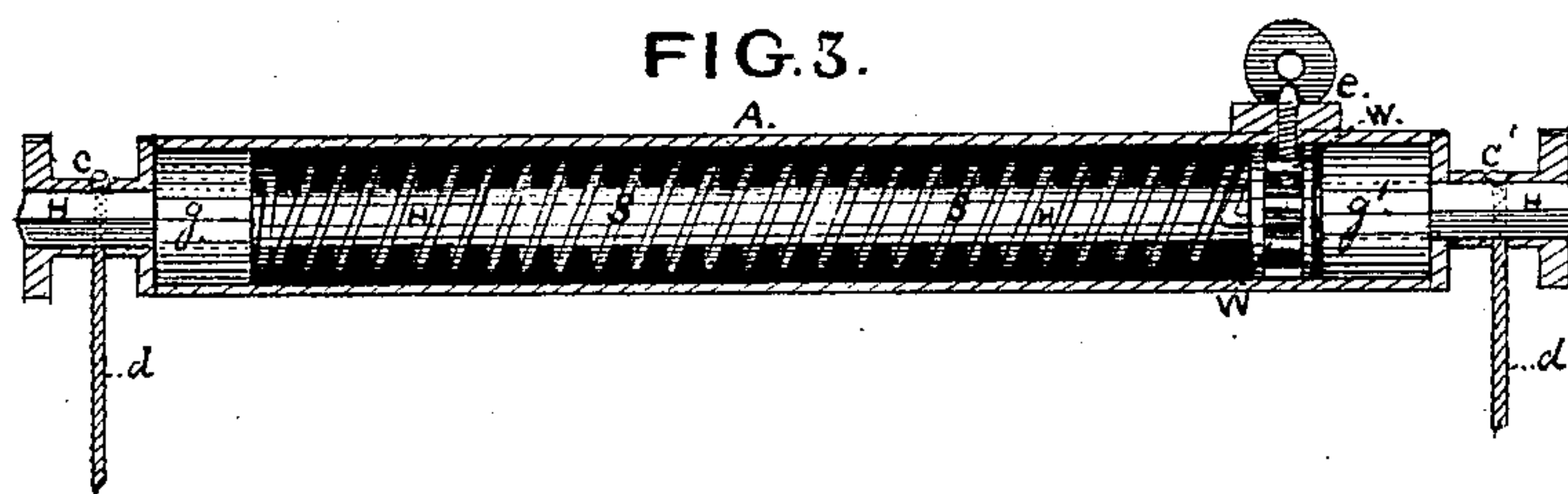
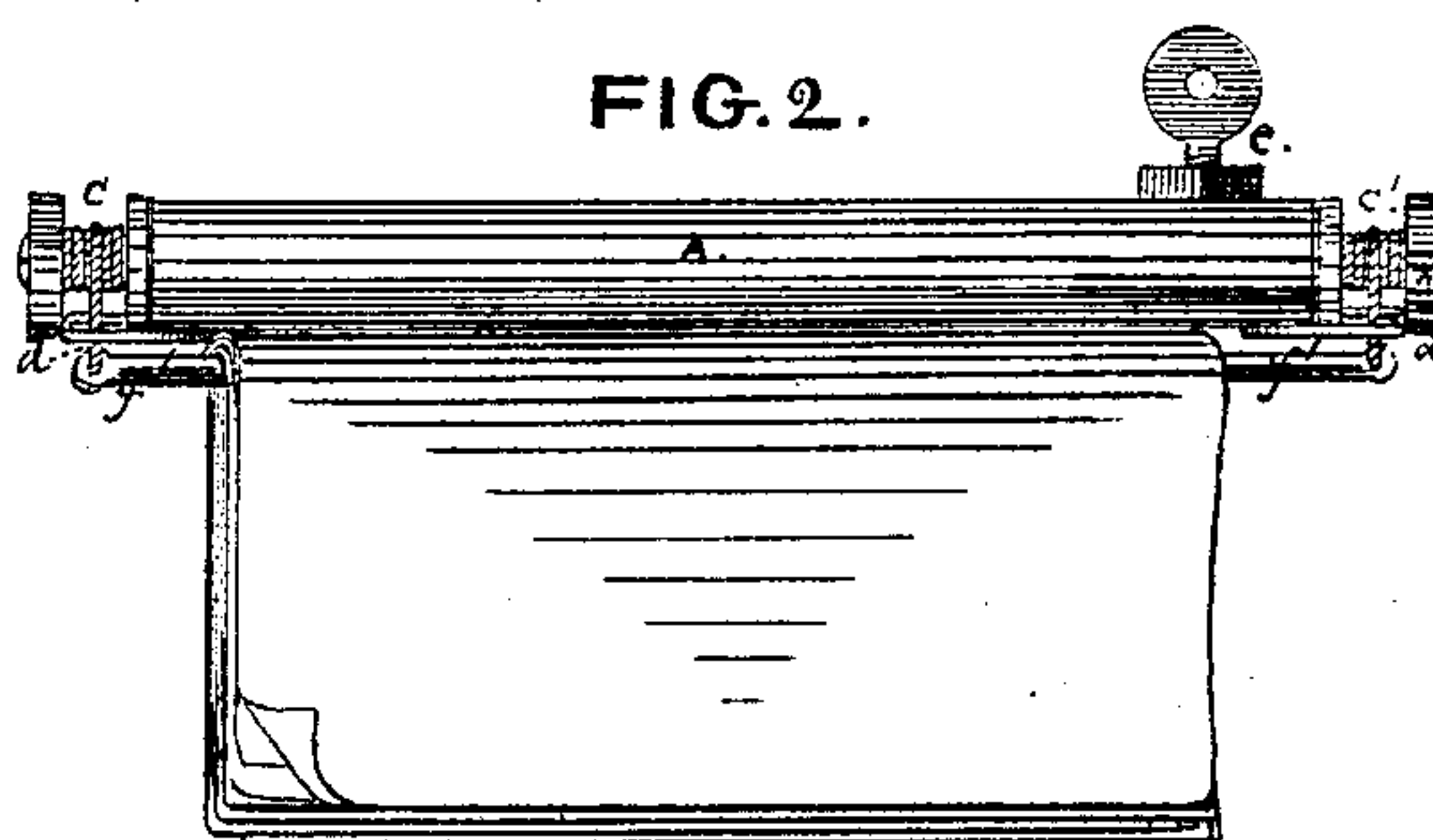
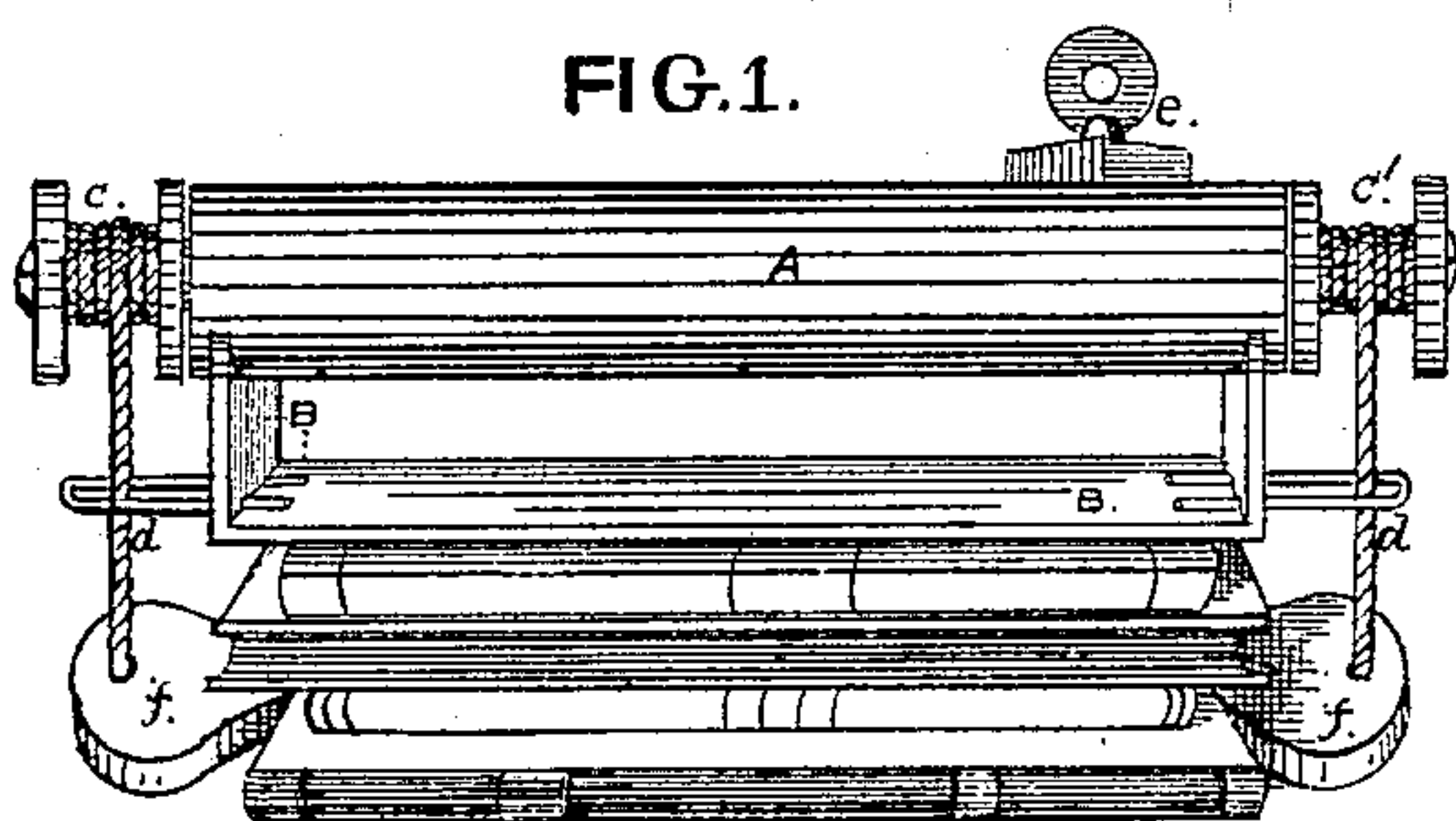


J. P. McLEAN.

Book and Paper Clamps.

No. 143,088.

Patented September 23, 1873.



WITNESSES.

{ G. E. Hawkes
Anne P. McLean }

INVENTOR.

James P. McLean

UNITED STATES PATENT OFFICE.

JAMES P. McLEAN, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN BOOK AND PAPER CLAMPS.

Specification forming part of Letters Patent No. **143,088**, dated September 23, 1873; application filed February 20, 1873.

To all whom it may concern:

Be it known that I, JAMES P. McLEAN, of the city of Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Book and Paper Clamps, which I term an automatic clamp or file; and I hereby declare in what manner the same is to be constructed and arranged to operate by means within itself, reference being had to the accompanying drawings, which are lettered to correspond with and form a part of the specification.

To enable the public to understand the nature of my said improvement, and those skilled in the mechanic arts to construct and operate the same, I will describe it as follows, to wit:

Figure 1 is an elevation of the book-clamp, showing the stationary cylindrical handle A with guard B, self-winding spools *c c'*, cord *d*, screw-nut and pin *e*, clamping-strip *f*. The said screw-nut and pin regulate the winding movement of the spools *c c'*.

Fig. 2 is another side elevation of the same device, having removed the guard B, and substituted in lieu of the flat clamping-strip *f* a small rod, *f'*, which is operated by the spools *c c'*, stop-pin and nut *e*, with or without a screw-thread upon the same, in the same manner as Fig. 1, so as to constitute and form a self-operating clamping paper-file.

Fig. 3 is a longitudinal sectional drawing of Figs. 1 and 2, showing the fixed cylindrical handle A secured to and forming a part of the stationary end blocks or bearings *g g'* of the revolving-spindle H, with a spool or reel, *c*, upon each end thereof, to be operated by the wound or spiral spring *s*, which is held at any point by means of the open bar or cog-wheel *w*, stop-pin and nut *e*, which may be arranged at either end of the cylinder, or at the center thereof, in which latter case I would employ two springs in lieu of spring *s*. One end of each spring must be secured to and revolve with the open-barred stop-wheel *w*, while the opposite ends of the springs are firmly fastened to the ends of the handle or stationary cylinder A, or to the bearings *g g'*,

so that each spring will wind up in the same direction with the other when the clamp or file is opened to receive the books or papers; and, where a single spring, *s*, is used, one end thereof must be firmly secured to the stationary handle or cylinder or to the bearing *g*, while the opposite end of the spring *s* is fastened to the revolving wheel *w* or shaft H; and the said spring or springs are held at any required tension by the screw or other pin and nut *e* passing into the open or other gear-wheel *w*, and, when the said pin is withdrawn, the action of the winding-spring takes up the slack of the cord or cords, and holds the file or clamp firmly together in proportion to the size of the spring *s*, which may be of fine wire or flat steel, for papers; but, for books, I would use from No. 16 to 14 tempered brass or steel wire, each coil separated from the other to obtain the fullest power of the spring *s*.

When the books are in the clamp, the spindle may be wound up a little tighter by turning the spools at either end before tightening the screw-piece *e*.

I am aware that a number of patents for operating cylindrical rollers for windows by means of spiral springs secured around a stationary shaft passing longitudinally through said rollers, and otherwise arranged, are in common use. Therefore, the same does not form any part of my present application for a patent; but the novelty of my invention consists in the use of a revolving spindle inside of a stationary handle of a book-clamp or paper-file, said spindle being provided with spools or reels to take up and hold the slack of the cord or cords by means of a suitable spring or springs, and an open-barred or gear wheel arranged upon said shaft, and revolving with the same, the whole being held at any point of action by the stop-nut and pin forming a part of the handle of the self-winding clamp or file. Therefore,

What I claim as new and useful, and wish to protect by Letters Patent of the United States, is—

A self-winding book-clamp or paper-clamping file having a stationary cylindrical han-

dle, A, with or without the guard B, and provided with a revolving spindle, H, spools *c c'*, gear-wheel *w*, fixed nut and pin *e*, bearings *g g'*, spring or springs *s*, the whole secured, arranged, and operating in combination with the cord *d*, strip *f*, or rod *f'*, for the double purpose substantially as above set forth.

In testimony whereof I hereunto subscribe my name in the presence of two witnesses.

JAMES P. McLEAN.

Witnesses:

H. A. BROWN,
ANNE S. McLEAN.