(No Model.)

A. T. ATHERTON.

TEMPORARY BINDER.

No. 314,508. Patented Mar. 24, 1885.

Fig. 1.

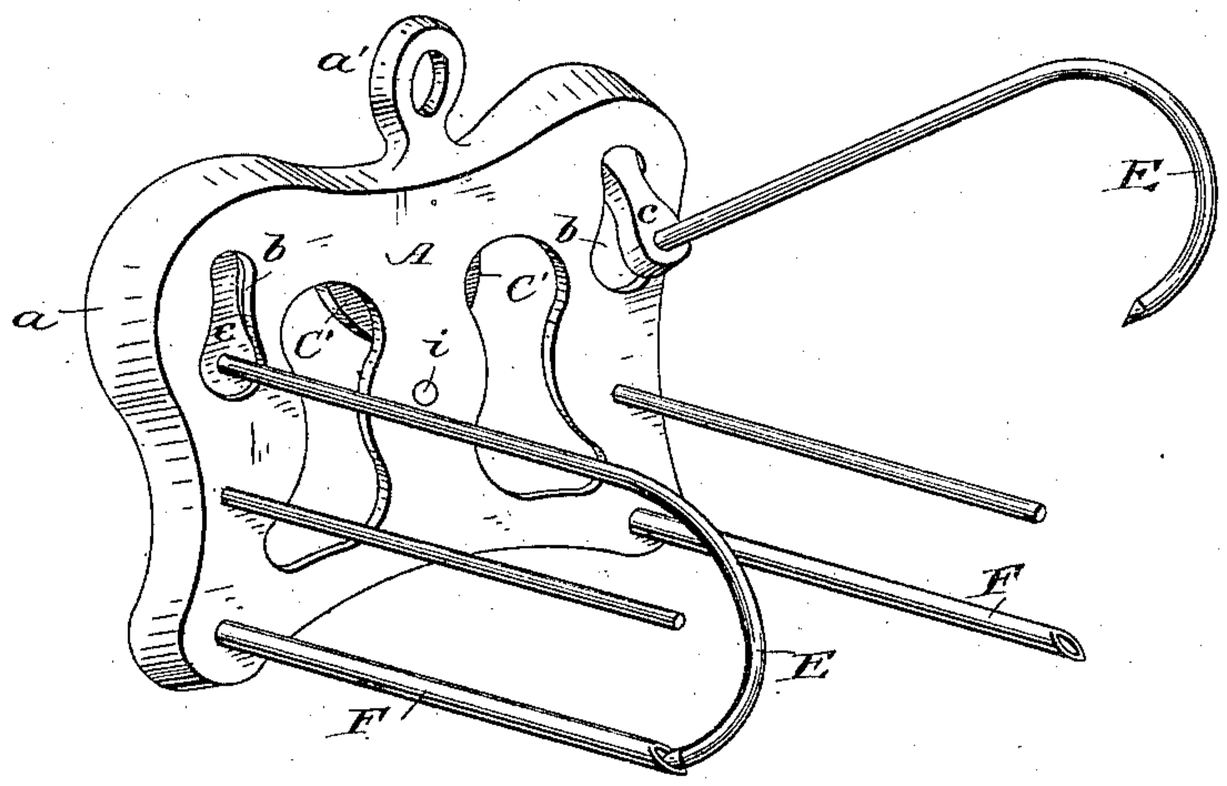


Fig. 2.

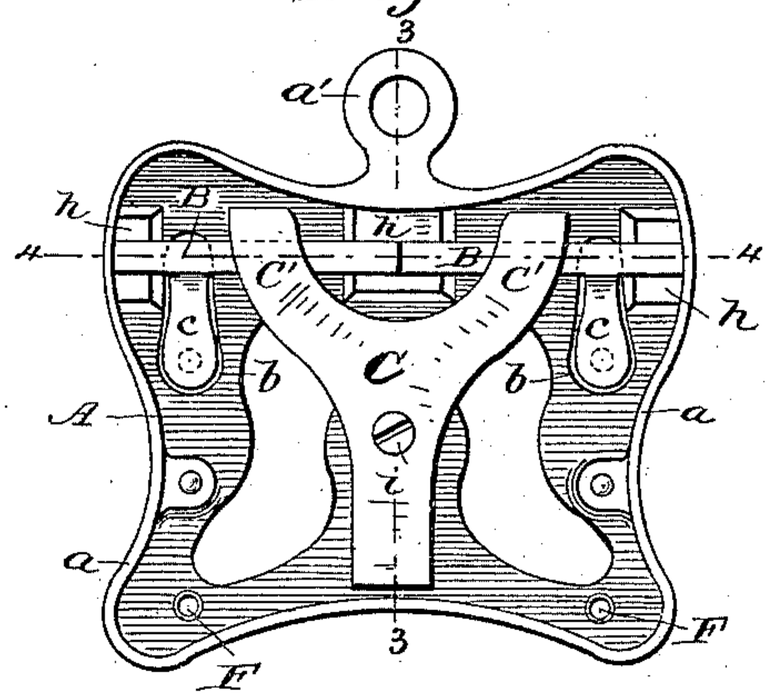


Fig. 3.

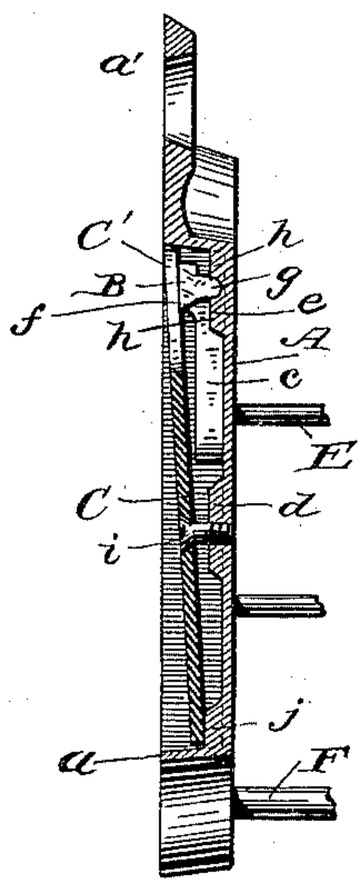
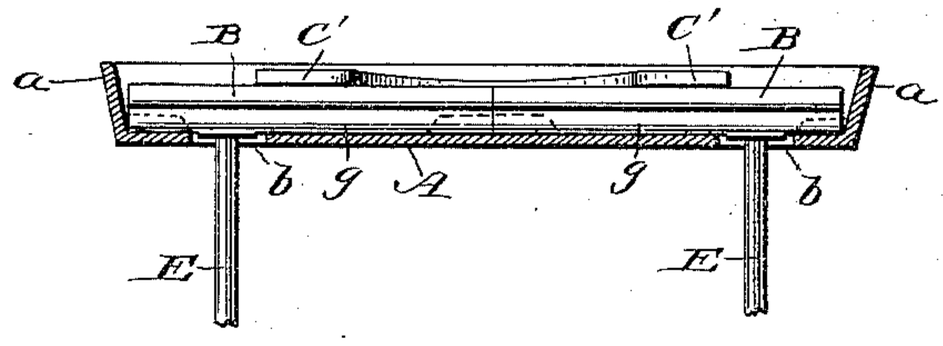


Fig. 4.



Witnesses:
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UNITED STATES PATENT OFFICE.

ABEL T. ATHERTON, OF LOWELL, MASSACHUSETTS.

TEMPORARY BINDER.

SPECIFICATION forming part of Letters Patent No. 314,508, dated March 24, 1885.

Application filed September 17, 1884. (No model.)

To all whom it may concern:

Be it known that I, ABEL T. ATHERTON, of Lowell, in the State of Massachusetts, have invented certain new and useful Improvements in Temporary Binders, of which the following is a specification.

My invention is an improvement upon the temporary binder illustrated in Letters Patent No. 272,028 of February 13, 1883. In the patented binder referred to the hinged or swinging retaining-wires are fast to one and the same hinged support, so that they must necessarily move together. This in practice has been found productive of trouble and inconvenience. In swinging back the wires it is usual to take hold of one, which serves as a handle by which the other also is turned back; but this operation not infrequently results in the straining and consequent distortion of the parts, with the result of throwing the wires out of adjustment. Again, if any accident which affects its proper operative relations happens to one of the hinged wires the other is also liable on that account to be also deranged; and, again, in filing narrow papers which go upon one post only it is necessary nevertheless to swing back both of the retaining-wires, thus causing unnecessary work. With a view to obviating these and other objections I have arranged the parts so that the swinging retaining-wires shall act separately from and independently of one another, thus preventing them from being affected one by the other, leaving the binder in condition as before to hold wide papers, while adapting it to be used much more conveniently for the filing of narrow papers.

My improvement will be readily understood by reference to the accompanying drawings, in which Figure 1 is a perspective view of my improved binder with one of the curved retaining-wires closed down upon its post and the other one swung back. Fig. 2 is a plan of the under side of the binder. Fig. 3 is a section on line 3 3, Fig. 2. Fig. 4 is a section on line 4 4, Fig. 2.

The base-plate A, like that in the Letters Patent hereinbefore referred to, is a flat casting with a rim, *a*, an eye, *a'*, at the top, and slots *b*, through which work the lugs *c* that carry the curved retaining-wires E.

F are the stationary posts, made tubular, as usual, and provided with beveled outer ends. Thus far there is nothing novel in the arrangement of the parts.

To make the curved retaining-wires capable of independent movement for the purposes hereinbefore stated, I hinge separately and independently the supporting lug or arm *c* of each. To this end, each arm or lug is attached to its own bar B. These bars are arranged on the under face of the base-plate, and each of them on the side next to the plate is provided with a longitudinal rounded bearing-rib, *g*, which enters a corresponding groove formed in bearings *h* on the base-plate. Each bar B has two bearings, *h*, one on each side of the slot *b*, through which its lug or arm *c* plays.

With a view to prevent any lengthwise movement of the bars they are of such length that their outer ends meet the rim *a*, while their inner ends are contiguous and work in one and the same bearing, which is long enough for both. The portions of the bars adjoining the ribs *g* form shoulders *f*, and the tops of the bearings *h* form stops *e*, which meet the shoulders and thus serve to limit the rearward swinging movement of the retaining-wires.

To hold the bars B in their bearing-grooves, I make use of a spring-strip, C, which is forked so as to furnish a spring, C', for each of the bars. The stem of the spring-strip is secured centrally by a screw, *i*, which screws down through the stem into a boss, *d*, on the base-plate. When the spring is secured in place, its end farthest from the bars B rests on a projection, *j*, on the base-plate, and thus serves to hold down the spring ends C' upon the bars B.

The arrangement of parts described has been found in practice to be entirely effective and satisfactory.

The construction is as simple and inexpensive as that of the patented device referred to. The hinged retaining-wires act separately from and are entirely independent of one an-

other, and they are at the same time held securely in proper position on their hinges without liability to derangement.

What I claim as new and of my invention is—

The combination, with the posts F and base-plate A, of the curved retaining-wires E, the separate bars B, one for each curved retaining-wire, abutting at their inner ends, the end and center bearings *h*, and the spring C, these parts being constructed and arranged in the manner herein shown and described.

In testimony whereof I have hereunto set my hand this 12th day of September, 1884.

ABEL T. ATHERTON.

Witnesses:

G. SPEARING,

CHAS. T. ATHERTON.