

(Model.)

W. R. CLOUGH.

BILL FILE.

No. 260,537.

Patented July 4, 1882.

Fig 1.

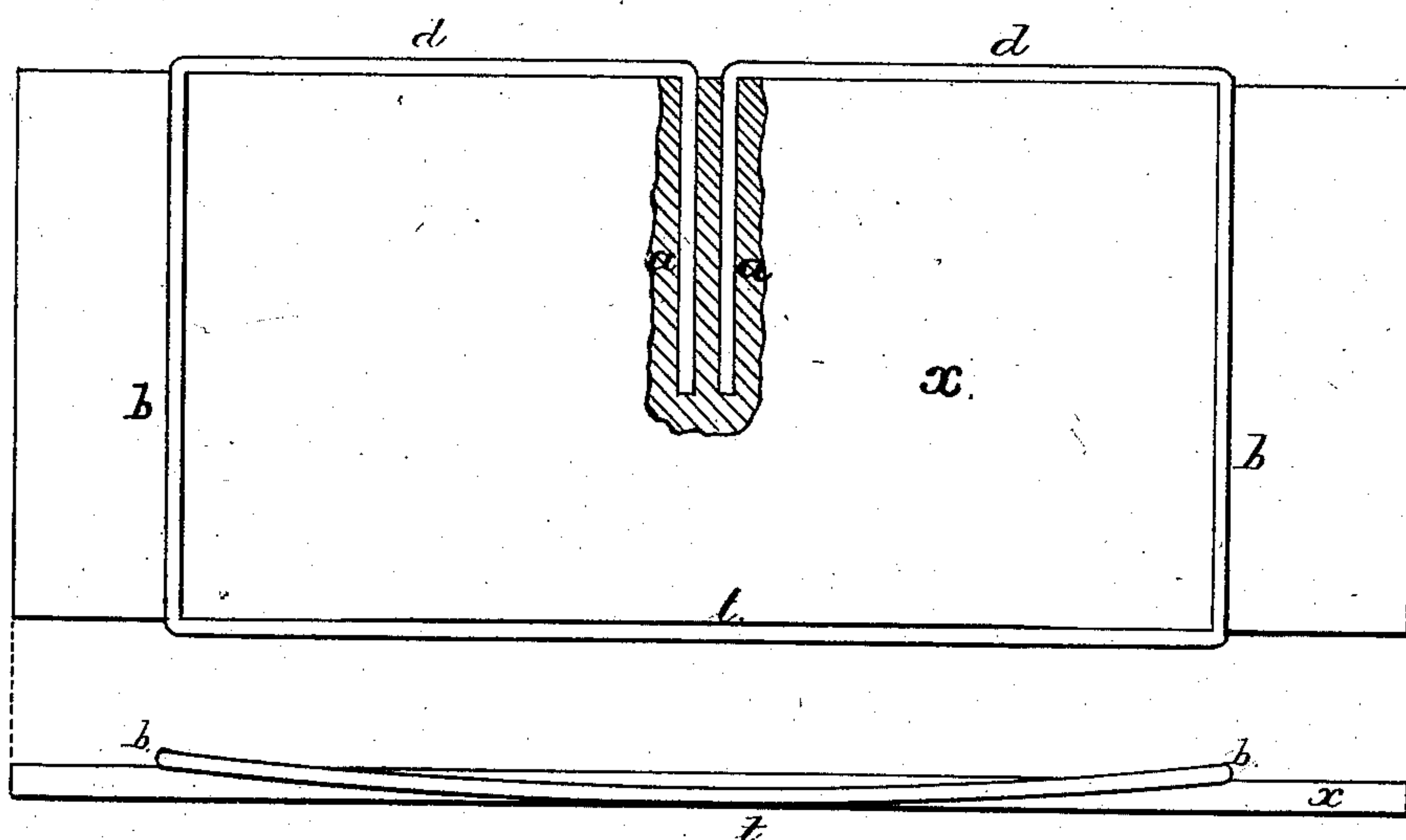
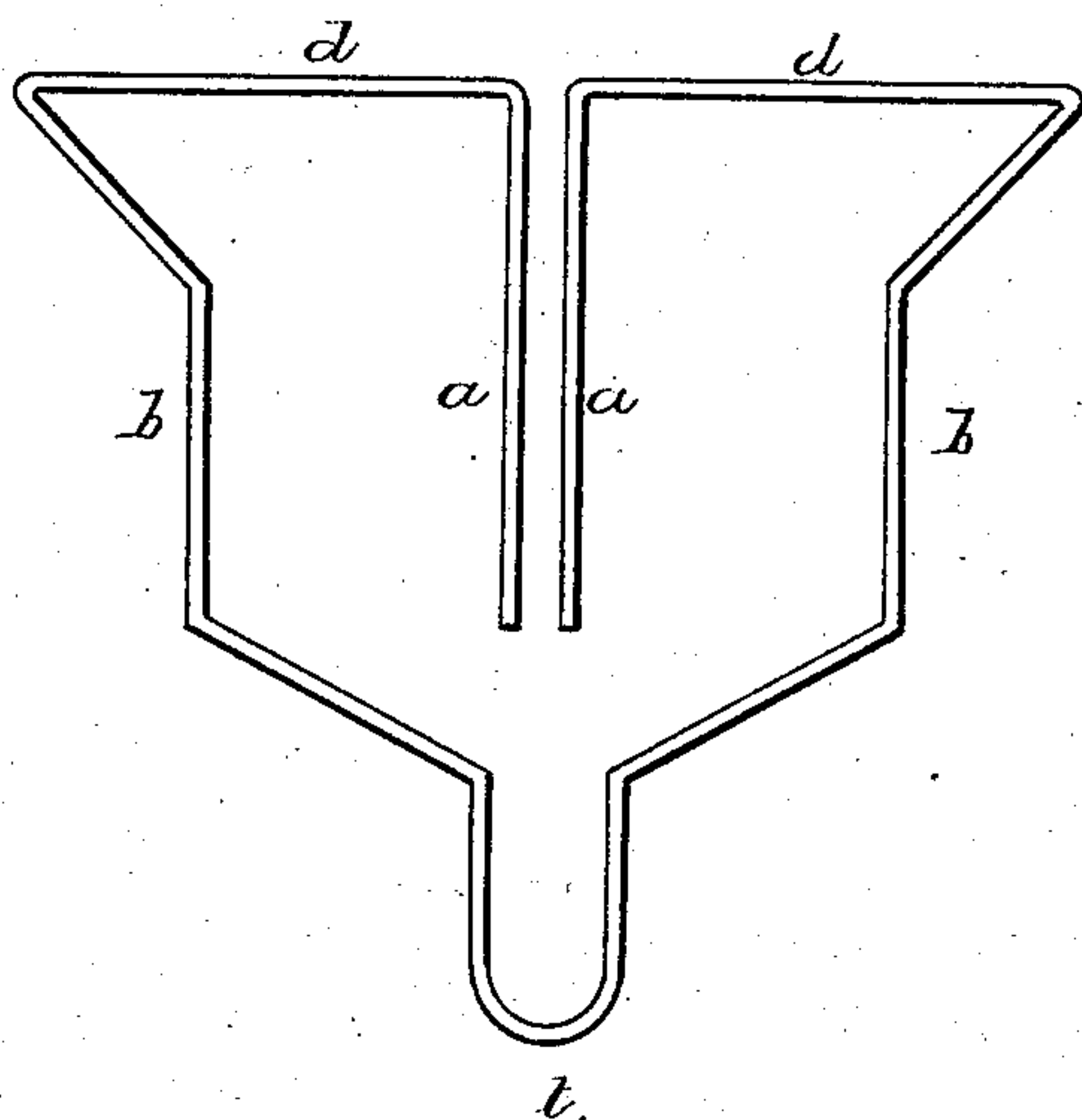


Fig 2.



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UNITED STATES PATENT OFFICE.

W. ROCKWELL CLOUGH, OF NEWARK, NEW JERSEY.

BILL-FILE.

SPECIFICATION forming part of Letters Patent No. 260,537, dated July 4, 1882.

Application filed March 1, 1882. (Model.)

To all whom it may concern:

Be it known that I, W. ROCKWELL CLOUGH, of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Binders and Holding Devices, of which the following is a specification, reference being had to the accompanying drawings.

The invention relates to an improvement in bill-files belonging to that class used for filing folded papers or those of narrow width, and where a base is connected with the top part or clamp by radial side arms.

My improvement consists in the use of these radial arms on one side only of the clamp, and in such a manner, hereinafter described, as to leave the opposite side open and free for the reception of the matter to be held without sacrificing any of the desirable features peculiar to this class of bill-files. This I effect in a very simple, inexpensive, and practical manner, as will be more fully understood by reference to the accompanying drawings, in which—

Figure 1 is a side and edge view of the device, and Fig. 2 is a view of a modified form of the clamp without a base.

I prefer to construct the clamp from a single piece of wire, but do not limit myself to the use of a single piece of wire, since it is possible to produce the device by constructing the members in separate parts and afterward uniting them to form the described clamp.

The drawings represent a clamp as made from a single piece of wire, which is bent to form the flat frame *b b*, open at one side, and the arms *a a* connected with the flat frame *b b* by the radial arms *d d*, which, when in a state of rest, lie in about the same plane with the flat frame *b b*. The arms *a a* are illustrated in Fig. 1 as being inserted in apertures at one side of the base *x*; but they may be secured thereto in any other convenient way. The frame *b b* rests flat upon the base *x*, and is held in that position at one side only, as shown, the radial arms *d d* being the connection between the frame *b b* and base.

The material to be held may be inserted beneath the frame *b b* at either of its free sides, and the capacity of the file will be governed by the length of the arms *d d*. The clamping parts are adapted to maintain their parallelism with and lie flat upon the surface of the

matter held. The frame *b b* has a tension downward on the matter held by reason of the flexibility of the radial arms *d d* and the torsion or twist in its (the frame's) sides produced by the radial movement of the arms *d d*; and when attached to a base the clamping power is increased by the bow tension of the frame *b b* springing outward at its open side. When the frame *b b* is elevated to permit the insertion of the matter to be held the arms *d d* move radially from a horizontal toward a vertical position, and the open side of the flat frame *b b* is thus caused to contract. The section *t* of the frame *b b*, Fig. 1, will have a tendency, or may be purposely bent, to bow downward, and in this condition, if arranged to overhang the edge, will serve as a guard for the package or article held.

It will be observed that the clamping-frame *b b* is secured at one side only to the base, and that the radial arms *d d* are permitted to have and facilitated in their movement by the contraction and expansion of the open side of the frame.

The device shown in Fig. 2 may be used without the base, and when thus employed the matter to be held will be inserted between the arms *a a* and the flat frame *b b*, in which condition it will be held by the torsion in the sides of the frame *b b* in a similar manner as in the device shown in Fig. 1. In said device shown in Fig. 1 the base *x* occupies the place of the parts *a a* of the file shown in Fig. 2. The irregular outline of the frame *b b* in Fig. 2 increases the bearing-surface of the file, and is advantageous in that respect.

In the file shown in Fig. 1 the torsion springs mostly from the two opposite sides of the frame, but to a greater or less degree extends throughout the entire frame; but whatever may be the contour of the frame, the expansion of its open side exerts a force outward against the radial arms *d d* and acts to clasp the parts against the matter to be held. It is true, also, that when the side of the flat frame *b b* opposite to its open side is elevated for the introduction of papers for filing a torsional strain will be created in the arms *d d*.

Having thus described my invention, what I claim is—

1. The file or binder herein described, consisting of the parts *a a*, the radial arms *d d*,

and the frame composed of the parts *b b* and *t*, substantially as specified.

2. A file or binder consisting of a flat frame composed of the parts *b b* and *t*, with a contracting and expanding open side opposite to the section *t*, and connected at the open side with the base *x* by the radial arms *d d* and parts *a a*, substantially as set forth.

In testimony that I claim the foregoing improvement in binders or holding devices, as above described, I have hereunto set my hand this 27th day of February, 1882.

W. ROCKWELL CLOUGH.

Witnesses:

CHAS. C. GILL,
HERMAN GUSTOW.