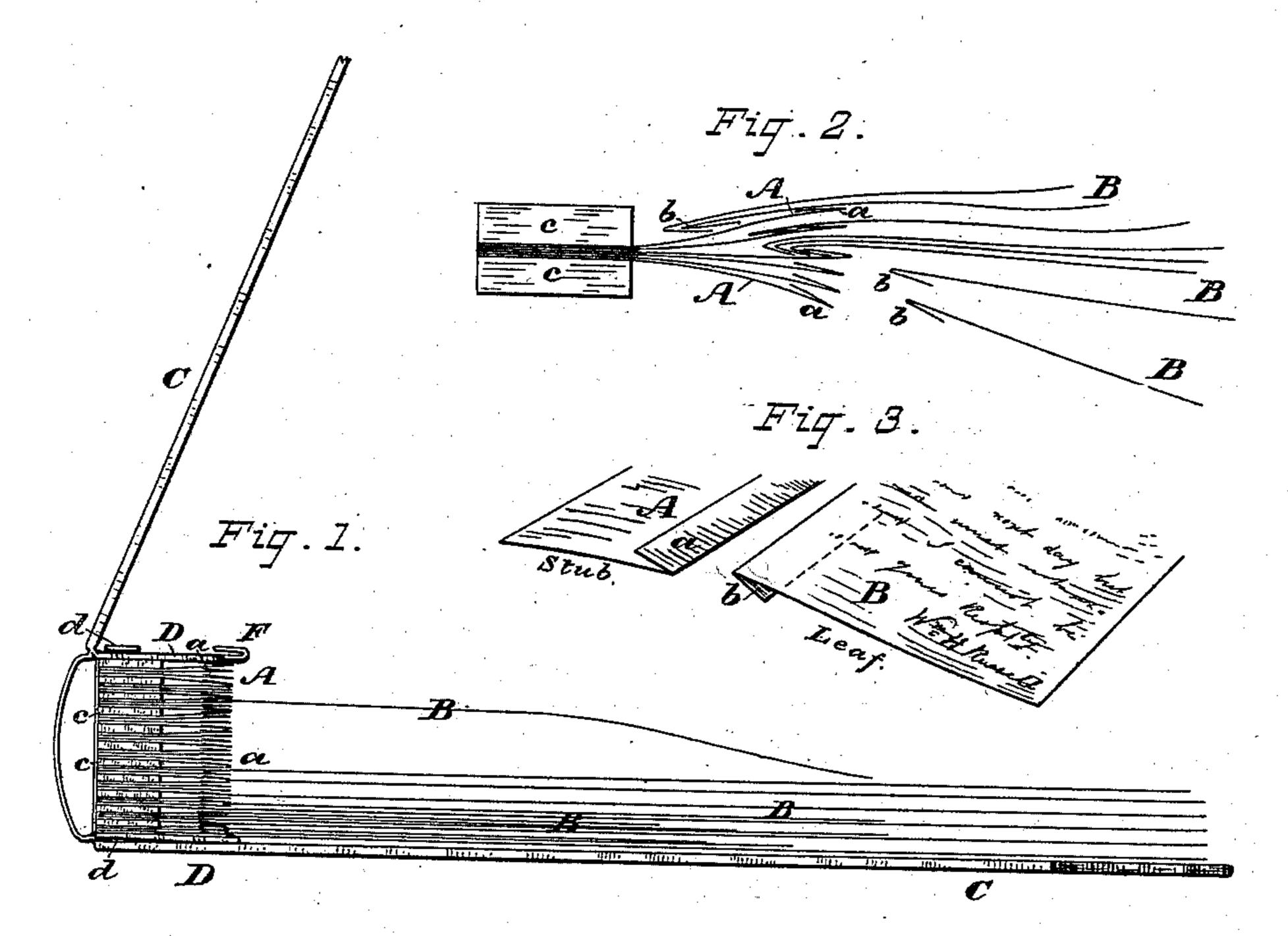
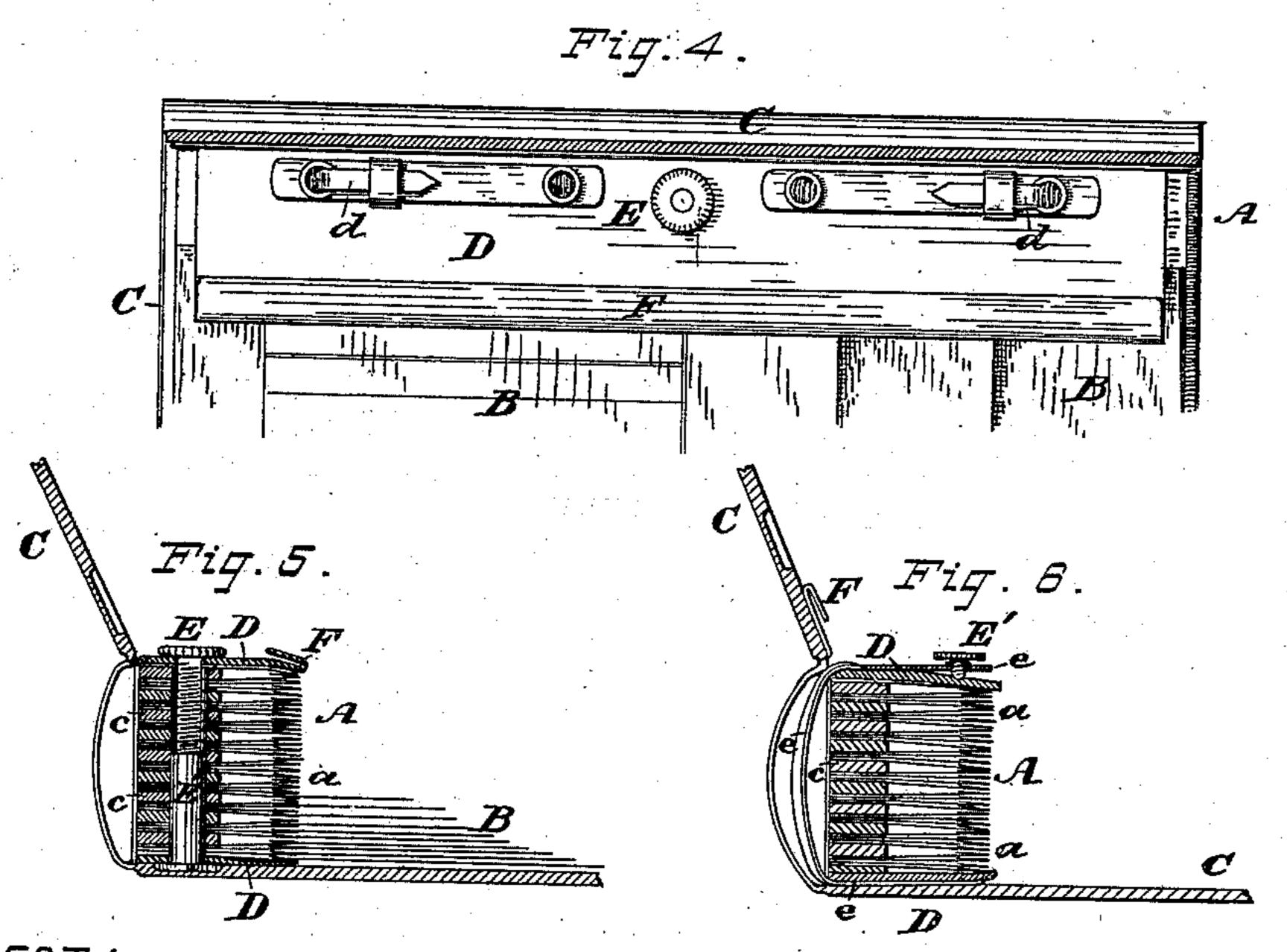
## W. H. RUSSELL. Bill-File.

No. 214,588.

Patented April 22, 1879.





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## UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN BILL-FILES.

Specification forming part of Letters Patent No. 214,588, dated April 22, 1879; application filed February 7, 1879.

To all whom it may concern:

Be it known that I, WILLIAM H. RUSSELL, of Corona, in the county of Bergen and State of New Jersey, have invented certain Improvements in Stub-Files for preserving letters, bills, and other papers in book form, of which the following is a specification.

The object of my invention is the production of a convenient and shapely file for bills, letters, and other papers, in which the papers can be quickly and securely inserted, and from which they can, when desired, be as readily

removed without injury to the file.

In the drawings, Figure 1 is an end elevation of my improved file. Fig. 2 is a similar view of a set of the stubs enlarged. Fig. 3 is a perspective view of a stub and leaf ready to be connected together. Fig. 4 is a plan of Fig. 1. Fig. 5 is a section, showing a tighteningscrew; and Fig. 6 shows a modified form of such screw.

My invention belongs to that class of files known as "stub-files," which consist of a number of stubs or strips of paper, or other suitable material, bound together in covers. It has been usual to coat one side of each strip with gum, to which, when moistened, the edge of the letter or other paper is applied, and thereby caused to permanently adhere. By a novel construction of the stub I dispense with gumming, greatly facilitate the insertion of the papers, and also admit of their ready removal when desired.

In the drawings, let A A represent the stubs, which are suitably fastened together at the back, a bunch or series of which is shown in Fig. 2. The front edge of each stub is reflexed or folded back upon itself, as shown in Fig. 3, for the whole length of the stub, forming a flat hook, a. B B are letters, bills, invoices, or other papers that it is desired to file, which I shall refer to as "leaves." Before filing the leaves a flat hook, b, is formed on that edge of each that is to be inserted between the stubs, of a similar character to the hooks a a on the stubs, with this difference, that the hooks a and b must be turned in opposite directions one upward and the other downward—as shown in Fig. 3.

The method of connecting the leaves B B with the stubs is shown in Fig. 2. The reflexed

or hooked edge of the leaf is inserted between two stubs, is pushed back far enough for the hooks a and b to pass each other, and is then drawn outward until the hooks engage, when the leaf is securely held in place against all ordinary pulling-strains. To remove the leaf it has only to be pulled up or down and drawn out at the ends of the stubs.

To give the back of the stubs when filled a thickness equal to their front edges, I provide guards or thickeners cc, of binders' board or other suitable material, interposed, as shown, between series or bunches of stubs, or, if preferred, between every two stubs. Index-leaves of the ordinary forms may also be interposed between the stubs, and be permanently secured

thereto, if desired.

In Figs. 1 and 4, I have shown the stubs A A bound in book form in temporary or permanent covers C C. A number of stubs, A A, with interposed thickeners c c, and with or without index-leaves, are fastened together at the back so as to form a solid block, which is secured in the covers C C in any suitable manner, that shown being by means of hinged embracing-flaps D D, and clamping or fastening strips or pins dd, of soft steel, passing through the stubs from one flap to the other, and their ends secured, as described in my patent of July 3, 1877, for temporary binder. In lieu of this method of fastening, any other known form of temporary or permanent binder may be used.

I prefer to make the flaps D D as wide as or wider than the stubs A A, in order that their forward edges may confine the stubs and prevent their spreading apart, in which case some of the hooks a or b might be pulled

out and the leaves B B released.

In some cases it may be necessary to exert some pressure upon the flaps in addition to that of the fasteners used in binding, to cause them to confine the stubs with sufficient force to keep the leaves B B from being pulled out. I provide for this purpose a screw, E, (shown in Figs. 4 and 5,) its head being exposed above the upper flap, by turning which the flaps may be brought together with the necessary force. The flaps D D should be of stiff strong material, metal being preferable.

In Fig. 6 is shown a modified arrangement

of the tightening device, consisting of a C-spring, e, embracing the flaps, and a thumb-screw, E', passing through a threaded hole in the extremity of the spring and bearing against the flap.

One or more screws, E or E', may be em-

ployed, as may be deemed necessary.

The above-described tightening devices are especially useful when pieces of tissue-paper, such as press-copies, are to be filed, as, if folded a few times and their edges inserted between the flaps, they will be held with sufficient force.

To insure uniformity in turning down the edges of the leaves B B, as well as to facilitate this operation, I provide a gage, F, fixed on the cover or binder in some convenient position. This gage consists simply of a strip of metal having its edge bent back in the same manner as the stubs, into which the edge of the leaf is inserted, and the leaf turned over and folded down upon the metal. I prefer that the gage shall be upon the edge of and be in fact formed from one of the flaps, D, as shown in Figs. 1, 4, and 5.

When the stubs are contained in a temporary binder, as shown in Fig. 1, they may be removed when full and a new series substi-

tuted.

I claim as my invention—

1. As a file for letters and other papers, a series of stubs, A. A., fastened together at the back, and having reflexed or hooked front edges, a a, adapted to engage corresponding reflexed edges b b on the letters or other papers, substantially as set forth.

2. A series of stubs, A A, having reflexed or hooked front edges, a a, fastened together at their backs, with interposed guards or thick: eners c c, so as to form a solid block at the back, substantially as and for the purposes set

forth.

3. A stub-file consisting of the stubs A A, having reflexed front edges, a a, secured together at their backs, with interposed guards or thickeners, and embraced between flaps D D of covers C C, substantially as set forth.

4. A stub-file composed of stubs A A, having reflexed front edges, a a, and suitable flaps D D, provided with a folding-gage, F, permanently secured to said flaps, substantially as and for the purposes set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing

witnesses.

WM. H. RUSSELL.

Witnesses:

ARTHUR C. FRASER, HENRY CONNETT.