## I.S.Richardson. Paner File. N<sup>9</sup>52,323. Patented Jan.30,1866.

Fig. 1.

Fig. 2.

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Wilnesses. G. S. Grune Detirfores Inventor. Id. Richardon

## UNITED STATES PATENT OFFICE.

## ITHIEL S. RICHARDSON, OF BOSTON, MASSACHUSETTS.

## FILE-CLASP FOR DOCUMENTS, &c.

Specification forming part of Letters Patent No. 52,323, dated January 30, 1866; antedated January 19, 1866.

To all whom it may concern:

Be it known that I, ITHIEL S. RICHARDSON, of Boston, county of Suffolk, and State of Massachusetts, have invented a new and Improved Filing-Clasp for Documents; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which—

Figure 1 is a perspective view of the filingclasp, and Fig. 2 is a side view of the filing-

clasp.

The nature of my invention consists in providing two wires a little longer than the width of the fold of documents, these wires to have arms at each of their ends perpendicular to the first-mentioned wires. These arms may be straight or curved in any desired form. At the end of each of these arms, and connecting the arms from one wire with the corresponding arms from the other wire, are spiral-spring coils of wire on two or more revolutions of wire, one of these springs at each end of the clasp. By the action of these springs on the arms with which they are connected the firstmentioned wires are brought down on each other, holding tight whatever papers may be placed between them. The whole clasp may be bent of one piece of wire, or made in parts, as above described, and the two wires first mentioned, or one of them, may be flattened out so as to make a plate or plates, or a plate or plates may be soldered onto one or both of the first-mentioned wires, for the purpose of giving a greater degree of surface to the under or upper surface of either or both wires.

To enable others skilled in the art to make and use my invention, I will proceed to describe

its construction and operation.

I make of wire bent in the shape of three sides of an oblong square, with two such oblong squares overlying each other, and connected with each other by spiral springs at the corners, where the complement side of the oblong squares is vacant, one of the wires to

be a trifle longer in its length and shorter in its sides than the other, that it may spring up beyond the length of the other and catch its front length under the front length of the other.

The arms or ends of the upper oblong square may be bent in an oval or Y shape, as in the drawings, or plates may be soldered on said bent parts or plates, to make planes for the sides of the papers to rest against and be confined between, said planes to be perpendicular to the planes in which are the three wires composing the front and sides of the other oblong square.

When the clasp is to be used the wires are to be sprung apart, as is shown by the red lines in Fig. 2, and the papers properly folded placed between the front upper wires and the front lower wire, and then sprung back, and the papers will be firmly held between the upper and lower front wires and the Y-shaped side wires, or the plates used instead, and between the straight arms of the other oblong square.

In the drawings, a a a a represent the upper oblong square; b, the front length of the upper oblong square; c c, the springs connecting the upper and lower oblongs; d, the lower oblong; e, the sides of the upper oblong bent in an ornamental shape, as above described; f, the front of the lower oblong. g is the upper ob-

long bent down before using.

What I claim as my invention, and desire to

secure by Letters Patent, is—

The application of wire bent in the forms above described, together with the plates and springs of spiral springs in continuation, to be used for the filing or docketing of papers and documents, substantially as above set forth, and denominated the "spiral-spring file-holder."

I. S. RICHARDSON.

Witnesses:

SAMUEL G. GREENE, R. M. MILLIGAN.