

No. 782,420.

PATENTED FEB. 14, 1905.

T. G. SEARLES & M. SHEARER.

BINDING LOOSE OR FOLDED SHEETS OF PAPER OR OTHER MATERIAL.

APPLICATION FILED JUNE 16, 1904.

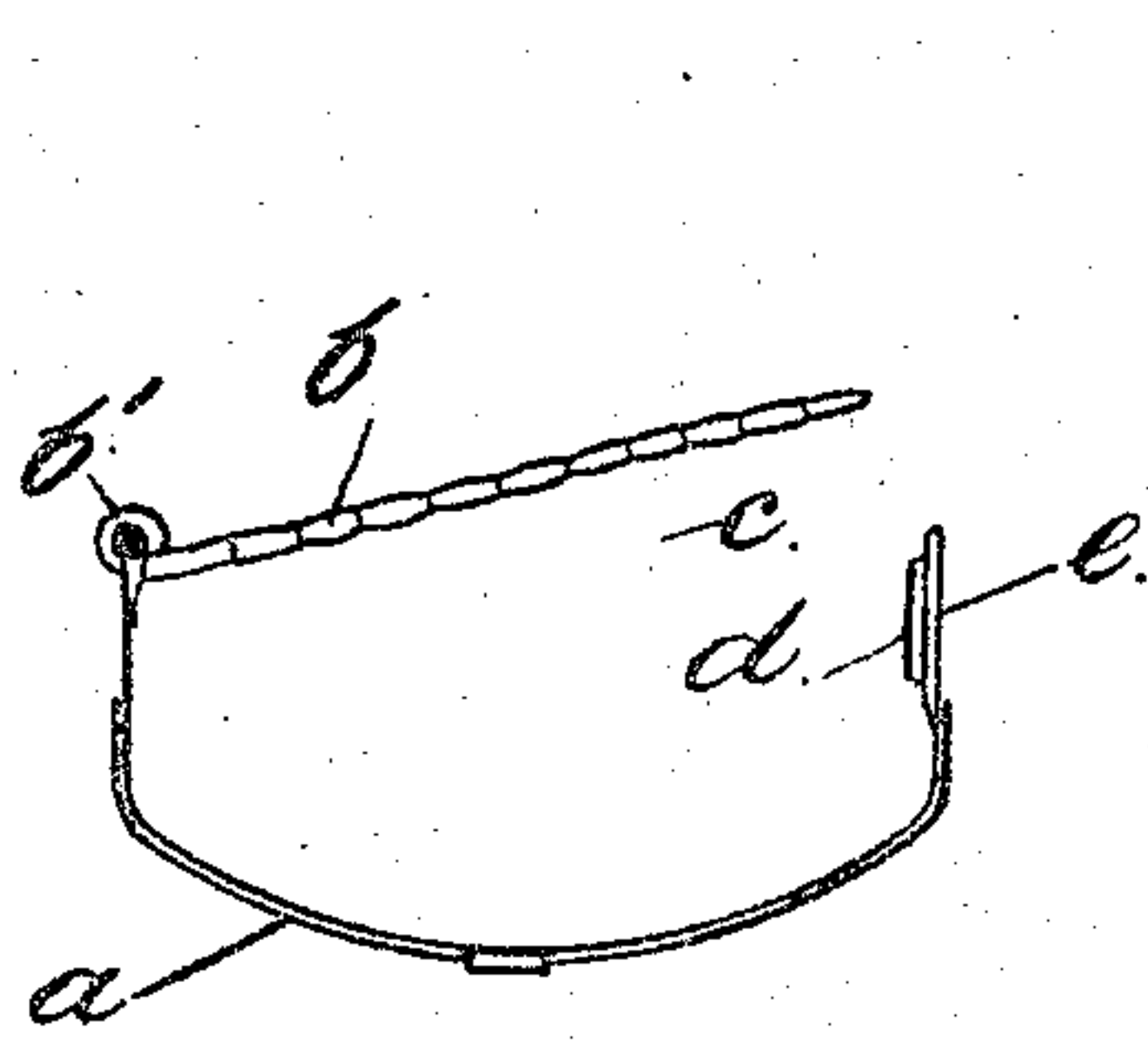
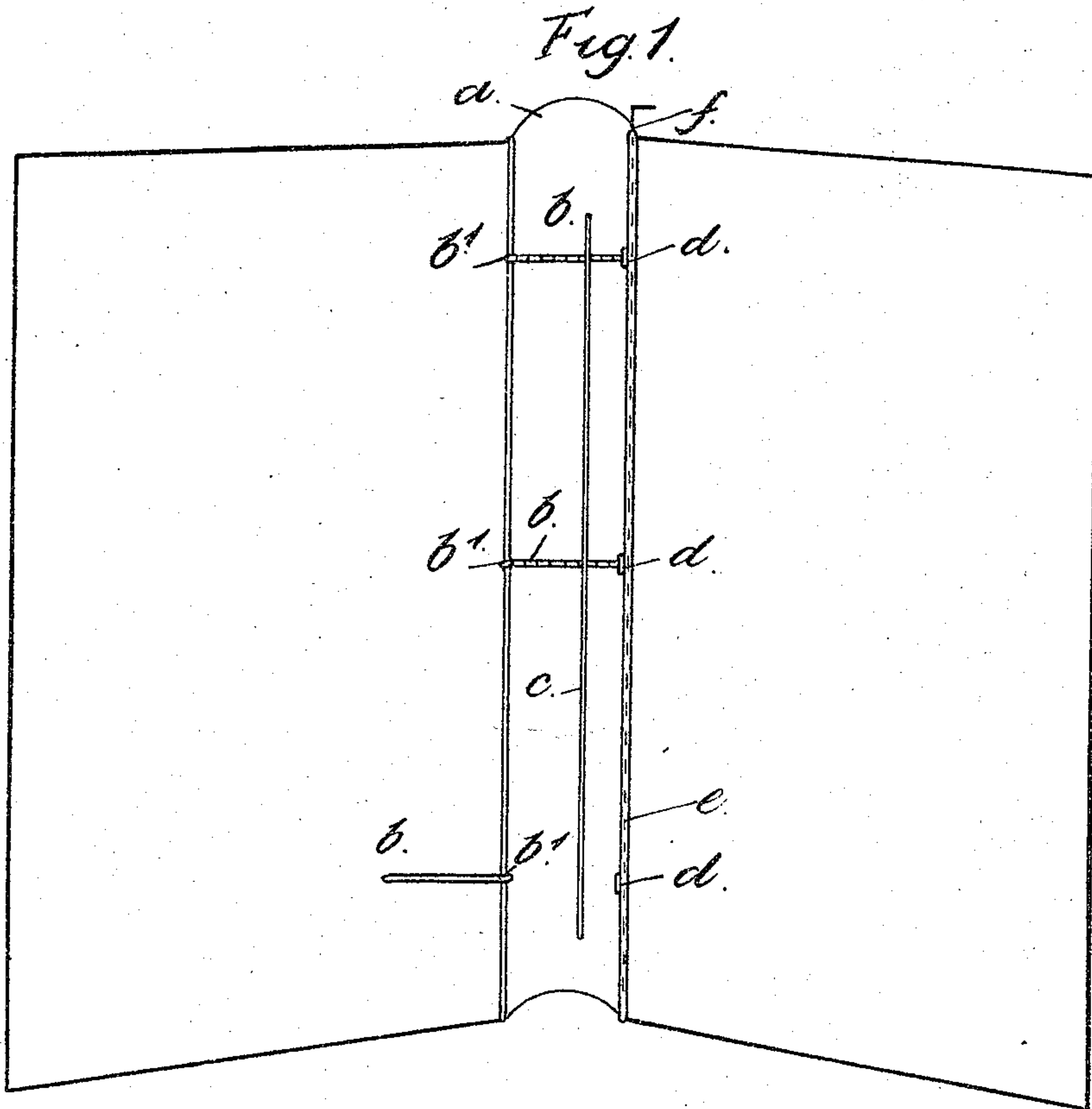


Fig. 2.

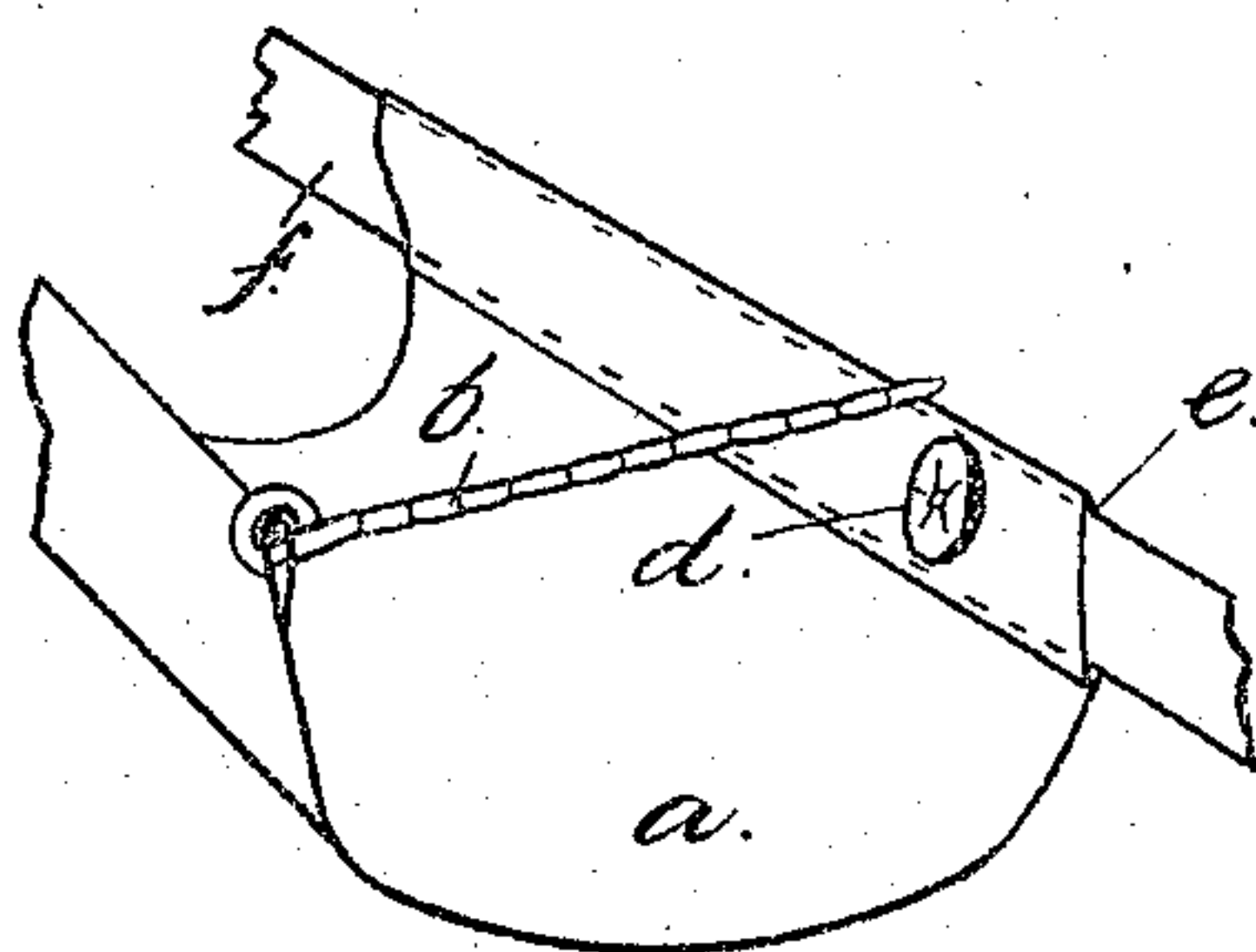


Fig. 5.

Fig. 4.

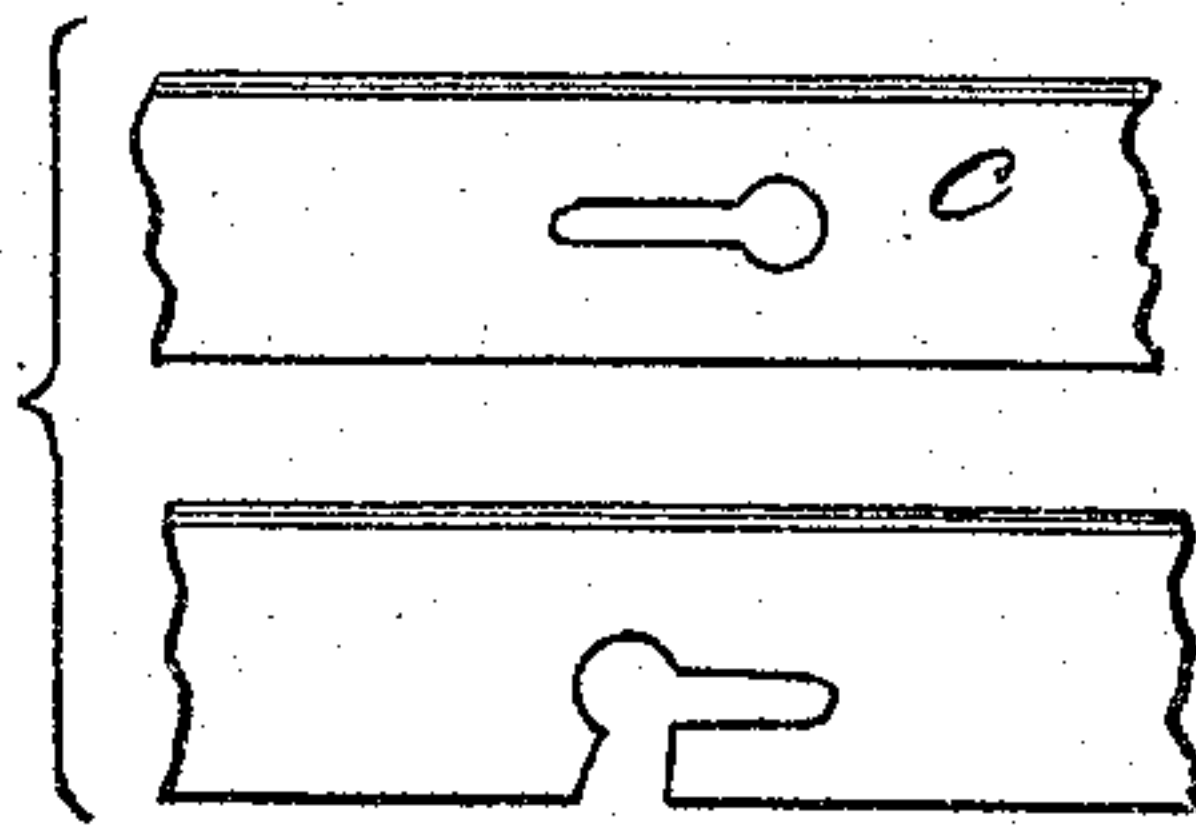


Fig. 3. (⊗) — d.

Witnesses.
A. C. Eli.
L. J. Jeffries

Inventors.
T. G. Searles
M. Shearer

UNITED STATES PATENT OFFICE.

THOMAS G. SEARLES AND MAURICE SHEARER, OF LONDON, ENGLAND.

BINDING LOOSE OR FOLDED SHEETS OF PAPER OR OTHER MATERIAL.

SPECIFICATION forming part of Letters Patent No. 782,420, dated February 14, 1905.

Application filed June 16, 1904. Serial No. 212,802.

To all whom it may concern:

Be it known that we, THOMAS GEORGE SEARLES, residing at 867 Old Kent road, and MAURICE SHEARER, residing at 809 Old Kent road, London, England, subjects of the King of Great Britain and Ireland, have invented certain new and useful Improvements Pertaining to the Binding of Loose or Folded Sheets of Paper or other Material, of which the following is a specification.

This invention relates to certain new and useful improvements pertaining to the binding of loose or folded sheets of paper or other material, and has for its object to provide means whereby such sheets of paper or other material may be securely and firmly held or locked in a binder or file whenever a required or desired number of sheets, whether one or several, may have been collected and placed therein.

The accompanying drawings illustrate the invention.

Figure 1 shows a file or binder open and fitted with our improvements. Fig. 2 is an end view of the spring-back of the binder, showing serrated pins or prongs and metal clamping-strip, together with spring fastening-plates. Fig. 3 is a front elevational view of spring fastening-plate, and Fig. 4 illustrates in front elevational views suitably-perforated clamping-strips. Fig. 5 is a perspective view of a portion of binder.

In carrying the invention into effect the file or binder is constructed with a spring or stiff back *a*, Figs. 1 and 2, of metal or other suitable material, attached to which are one or more pins or prongs *b* of any suitable section. These pins or prongs *b* are jointed at *b'* to one side of the spring or stiff back *a*, so as to form a hinge to enable said pins or prongs *b* to be put into a suitable position to place the loose or folded sheets thereon. After any required number of sheets have been placed on the pins or prongs *b* the sheets are held in position by the clamping-strip *c* of suitable metal or material with perforations to correspond with the pins or prongs *b* aforesaid, said strip *c* being ribbed or turned over at its top to hold firmly against the sheets, and it can be removed and

replaced when necessary. In Fig. 4 are illustrated two suitable arrangements of slots or perforations in the strip *c* for the purpose.

As more particularly illustrated in Fig. 2, the pins or prongs *b* are serrated to receive the clamping-strip *c*, which thus firmly hold the sheets in position. The points of the pins or prongs *b* are made conical with shoulders, and on the opposite side of the spring-back *a* of the binder are a number of spring-fasteners *d*, corresponding to the number of pins or prongs *b*. Such spring-fastener *d* is separately illustrated in Fig. 3 of the drawings and is preferably formed of a metal disk or button perforated centrally and having radial slits from such central perforation. The edge of the spring or stiff back *a* to which these spring-fasteners *d* are attached is preferably channel-shaped, as shown particularly in Fig. 2 at *e*, and the inner side of said channel is perforated correspondingly with the perforations of the spring-fasteners *d*. In the channel *e* is inserted a strip of metal or other suitable material *f*, which closes the holes in the channel, thus preventing the points of the pins or prongs *b* being inserted until it is required to fasten the file or binder. When it is desired to do this, the strip *f* is withdrawn from the channel *e* and the points of the pins or prongs *b* are then enabled to be forced through the holes of the spring-fasteners. The holes in the spring-fasteners *d* being smaller in diameter than the conical heads toward the points of the pins or prongs *b*, the said pins or prongs cannot be withdrawn when they are forced through beyond the shoulders. Hence the fastening of the file or binder then becomes permanent.

The spring or stiff back *a* of the binder or file may be provided with flat or other spring-pieces arranged or placed against or near the hinging-points of the pins or prongs or in other suitable position to strengthen the same and increase the spring force, if necessary.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. In binders or files for loose or folded sheets of paper or other material the spring-

back *a* formed with channeled edge *e* in combination with the serrated and conically-pointed pins or prongs *b* and spring fastening-plates *d* substantially as shown and described.

5
2. In binders or files for loose or folded sheets of paper or other material the spring-back *a* formed with channeled edge *e* in combination with the serrated and conically-
10 pointed pins or prongs *b*, the perforated clamping-plate *c*, spring fastening-plates *d* and re-

movable strip *f* substantially as shown and described.

In testimony whereof we have signed our names to this specification in the presence of 15 two witnesses.

THOMAS G. SEARLES.
MAURICE SHEARER.

Witnesses:

ALEXANDER CHARLES ELI,
SAMUEL JEFFRIES.