

No. 668,616.

Patented Feb. 26, 1901.

C. ABERLE.
LETTER FILE.

(Application filed June 22, 1900.)

(No Model.)

Fig. 1.

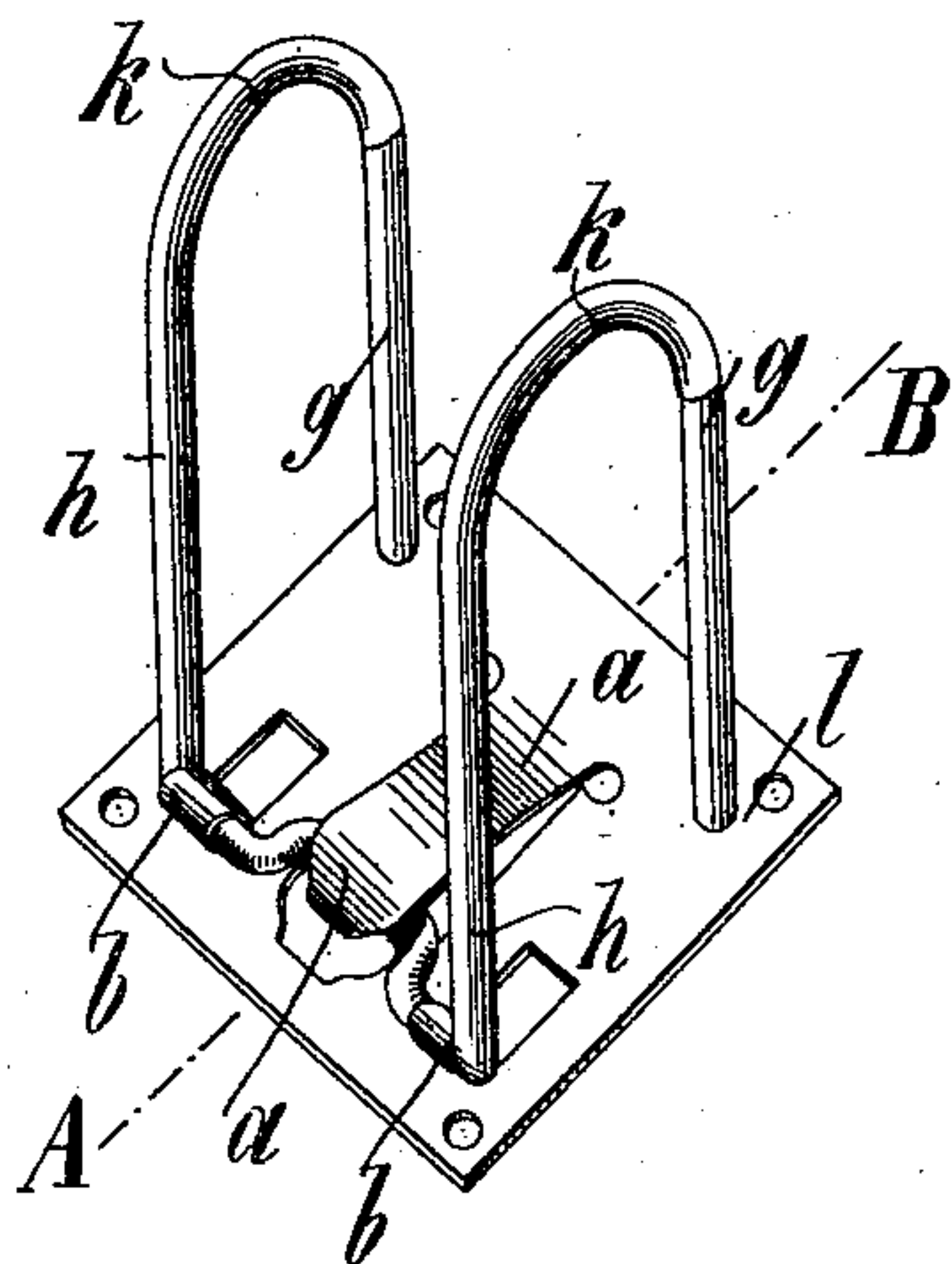


Fig. 2.

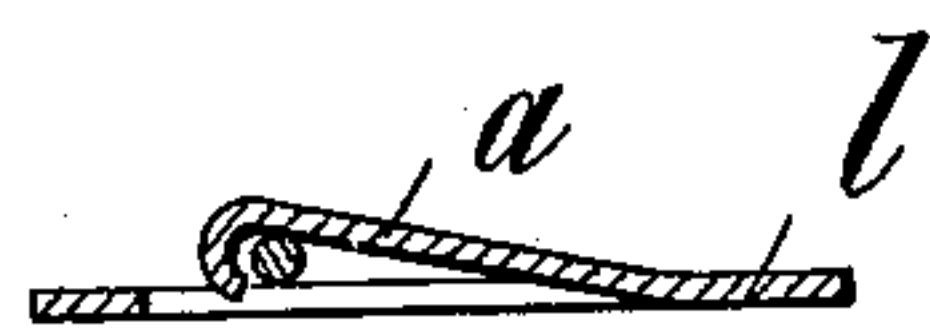
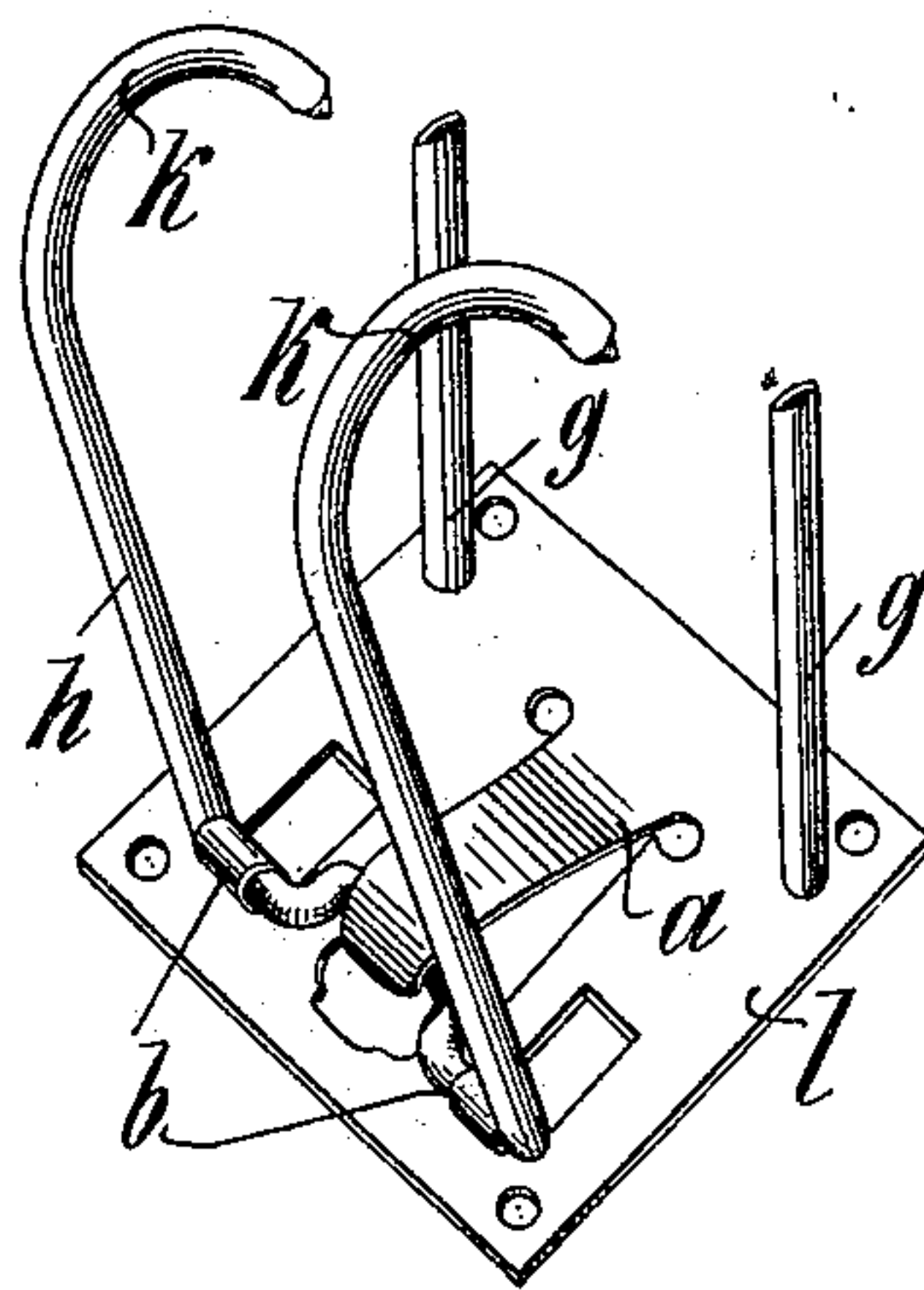


Fig. 3.

Fig. 4.

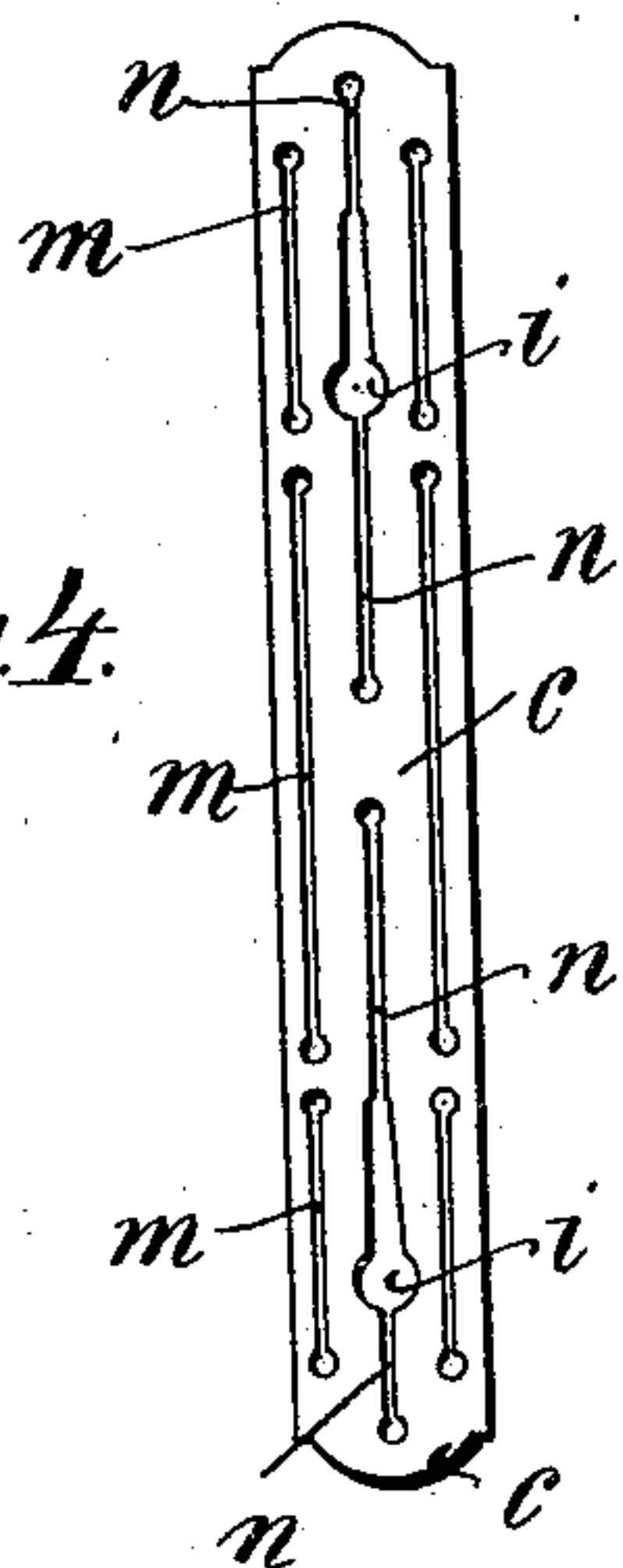
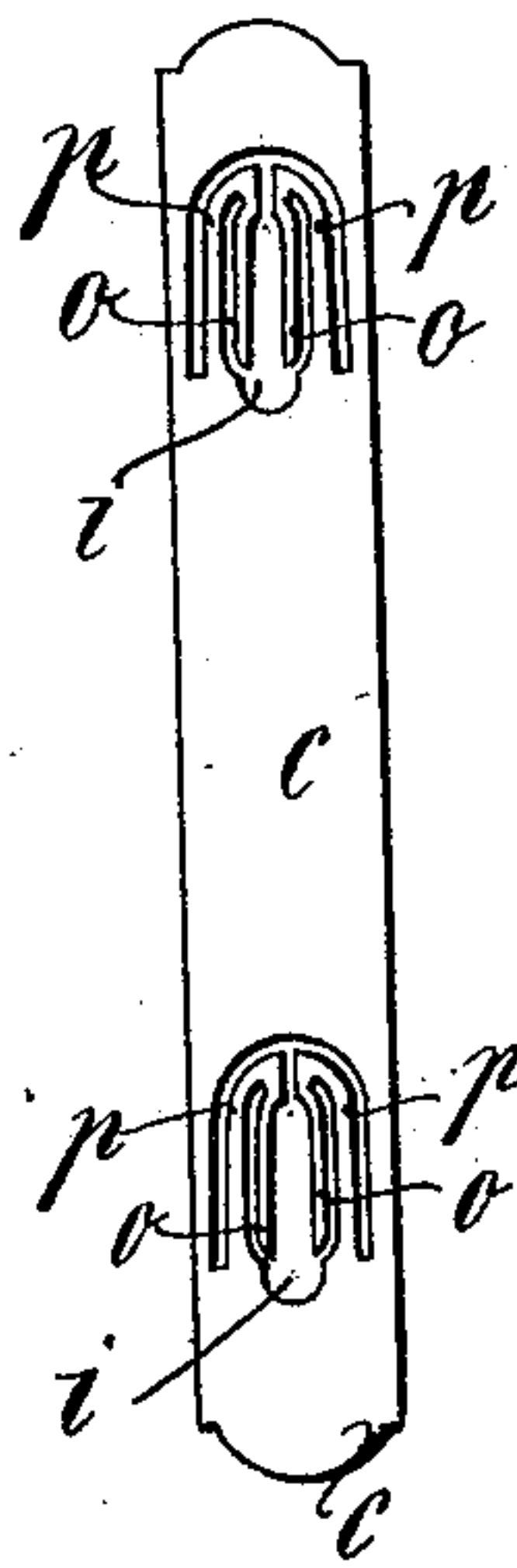


Fig. 5.



Witnesses:

Emil Dittler

Emil Dittler

Inventor:

Christian Aberle

by Frederick H. Hark
attorney

UNITED STATES PATENT OFFICE.

CHRISTIAN ABERLE, OF ST. GEORGEN IN THE BLACK FOREST, GERMANY.

LETTER-FILE.

SPECIFICATION forming part of Letters Patent No. 668,616, dated February 26, 1901.

Application filed June 22, 1900. Serial No. 21,173. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN ABERLE, manufacturer, a subject of the German Emperor, residing at St. Georgen in the Black Forest, Germany, have invented new and useful Improvements in Letter-Files, of which the following is a specification.

The present invention relates to certain new and useful improvements in letter-files; and it has for its objects to simplify and cheapen the construction, to improve the appearance, and to render more efficient, durable, and serviceable in operation this class of devices.

With these ends in view the invention consists in certain novel features of construction and combination of parts hereinafter described, shown in the accompanying drawings, and then specifically defined in the appended claims.

Referring to the drawings, Figure 1 shows a perspective of my improved letter-file closed. Fig. 2 illustrates same open. Fig. 3 is a section on line A B of Fig. 1, and Figs. 4 and 5 show two different constructions of the locking or retaining plate.

In the well-known constructions of letter-files the ears for holding the arched wires were provided by cutting or stamping the material forming the base-plate sufficiently larger to form extensions, which on being curled up form the sockets or bearings for the arched wires. This procedure is unsuitable and defective, seeing that by the cutting or stamping of the ears as extensions of the base-plate a waste of material takes place. The arched wires were hitherto locked in their two extreme positions by means of special springs, which had to be riveted to the base-plate, thus taking up a considerable time, increasing the expenses, and deteriorating the appearance of the letter-file. To remedy these defects in a simple and advantageous manner, I cut or stamp from the body of the base-plate of the proper size the ears *b*, which are to form the sockets or bearings for the cranked portion *h* of the arched wires *k*, and the locking or retaining spring *a*, which is to secure the two extreme positions of the cranked portion *h* of the arched wires *k*. The ears *b* are curled up for the purpose around the wire *h*, while the spring *a*, which has its extremity suitably bent to

prevent the crank *h* from being pulled backward too far, is bent upward. The ends of the arched wires *k* fit the upper ends of the vertical tubes *g*, which are secured to the base-plate *l* in the usual way for locking the papers filed on said vertical tubes. On pulling backward the arched wires *k* by hand until the spring *a* locks them in their open position the letter-file will be opened and the papers are accessible for the purpose of removal or filing of fresh papers or letters. The actuation of the arched wires *k* can suitably be effected by the employment of a lever or eccentric in connection with the spring *a* in any convenient manner. The base-plate *l* is secured to the inside of the back of the letter-file cover in the usual way.

The second part of my invention refers to the retaining or locking plate for securing the file on the vertical tubes *g*. Many different constructions have been devised to construct these retaining-plates so as to be lastingly effective; but they all required a plurality of constituent parts to attain the required flexibility of the slots for the vertical tubes, seeing that a conical or tapering slot alone will not act, as the body of the plate from which they have to be stamped prevented it being flexible. To render such conical slots *i* for the vertical tubes *g* of the letter-file elastic without the aid of auxiliary means, I provide longitudinal cuts *m* aside the slots *i* in the body of the plate *c*, thus dividing the width of the plate partially without imperiling its stability. In addition I may split the plate *c* farther than the conical slots *i* extend, as shown by *n* in Fig. 4. In this manner the flexibility of the walls of the conical slots *i* is attained without the use of special springs.

The cuts *m* in the body of the plate *c* may be arranged, as shown in Fig. 5, so that the vertical tubes *g* first push aside the tongues *o o* and on progressing toward the narrower end of the slot *i* they have to push aside the joined double tongues *o* and *p*. I do not limit myself, however, to any special kind of cuts in the body of the plate *c*, as many modifications may be made in the shape or design of them without departing from the spirit of the invention.

What I claim as new, and desire to secure by Letters Patent, is—

1. In combination with a letter-file of the kind described, a retaining-plate for the papers on the vertical tubes, said retaining-plate provided with tapered slots *i* and suitably-shaped longitudinal cuts about the tapered slots, which cuts divide the plate material and thus render the same elastic, substantially as set forth.

2. A retaining-plate for the papers on the vertical tubes of a letter-file having two tapered slots *i* for the reception and locking of the vertical tubes, and a plurality of suit-

ably-shaped cuts aside and in line with the tapered slots, said cuts dividing the plate material so as to render the tapered surfaces of the slots *i* elastic, substantially as set forth. 15

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHRISTIAN ABERLE.

Witnesses:

H. W. HARRIS,
J. ADRIAN.