

No. 778,509.

PATENTED DEC. 27, 1904.

G. H. SCHIEK.
SEPARABLE HINGE.
APPLICATION FILED MAY 2, 1904.

Fig. 1.

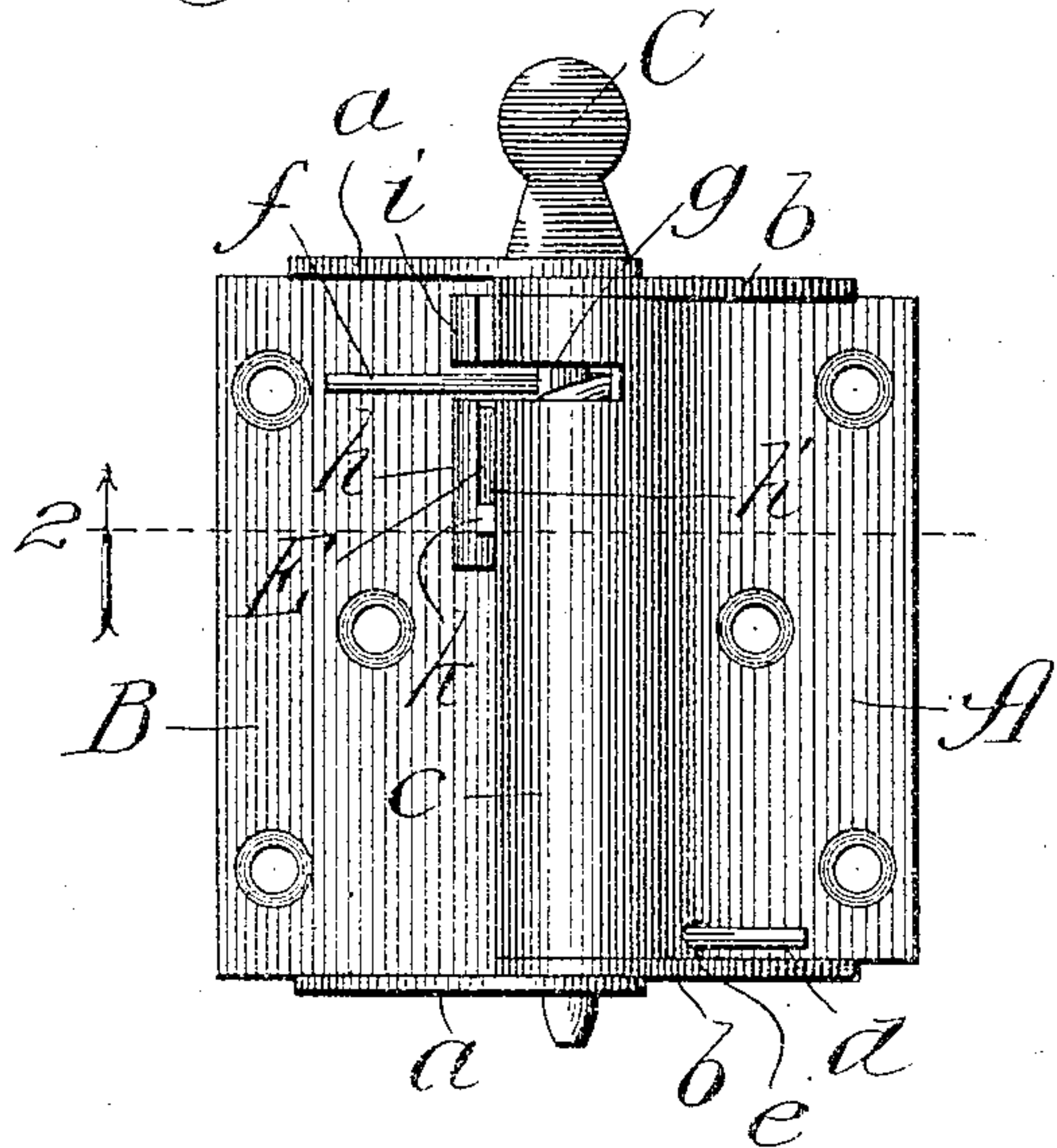


Fig. 2.

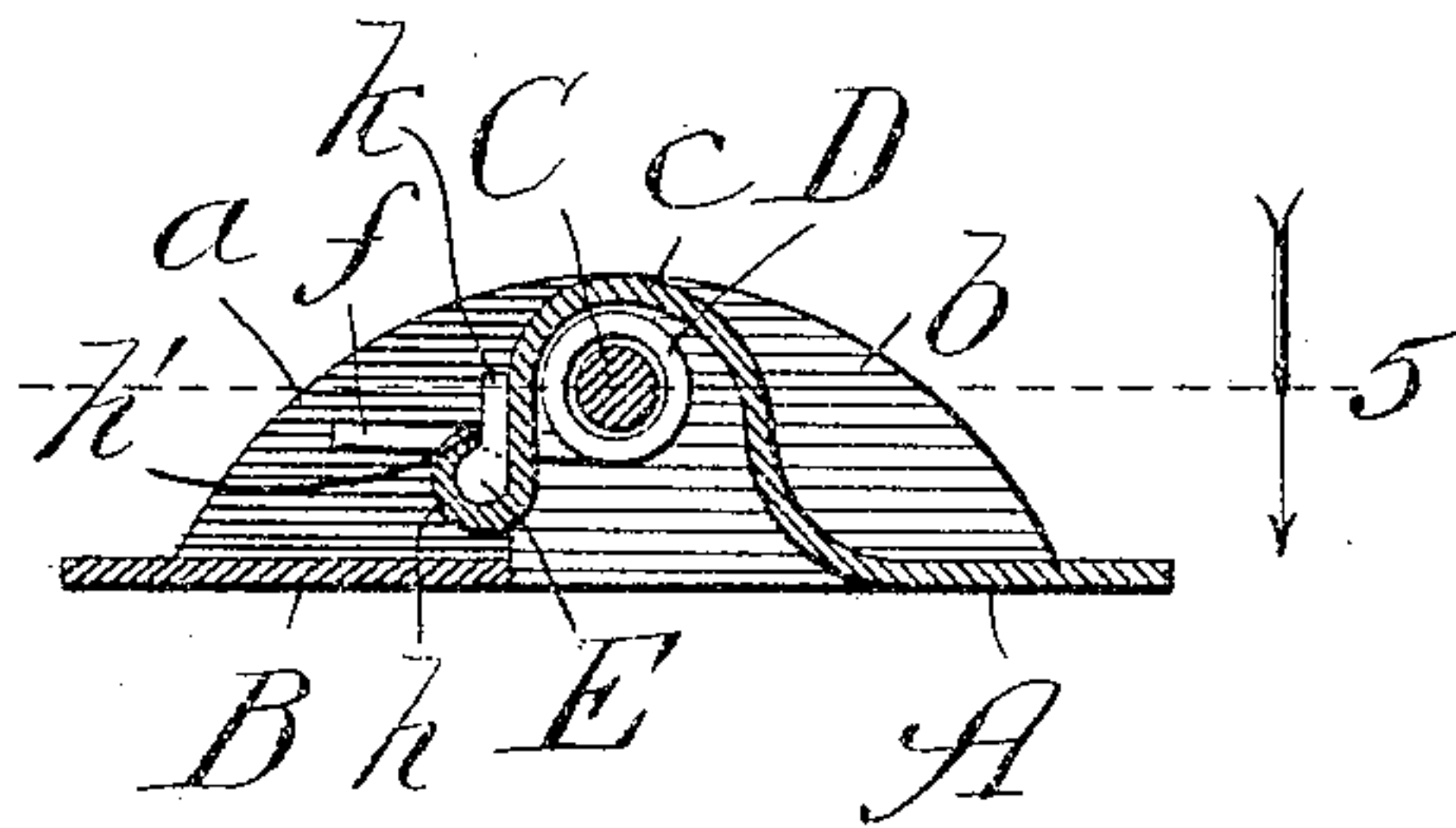


Fig. 3.

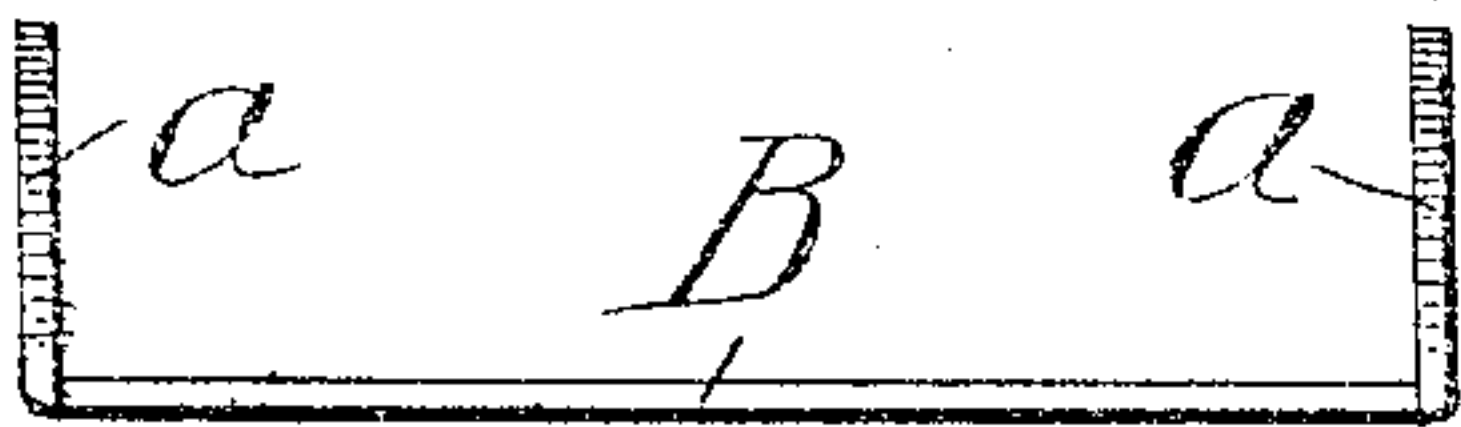


Fig. 4.

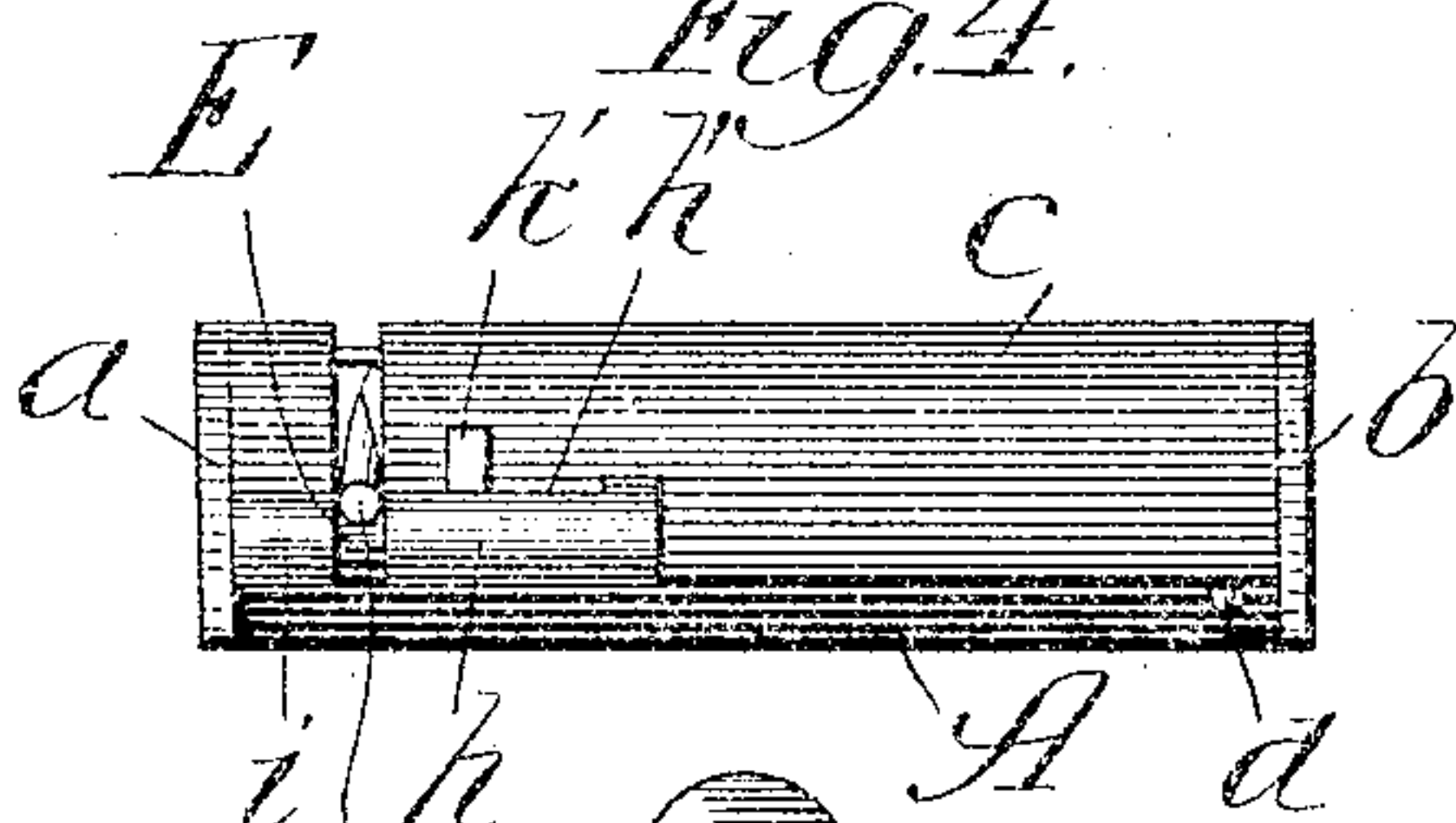


Fig. 5.

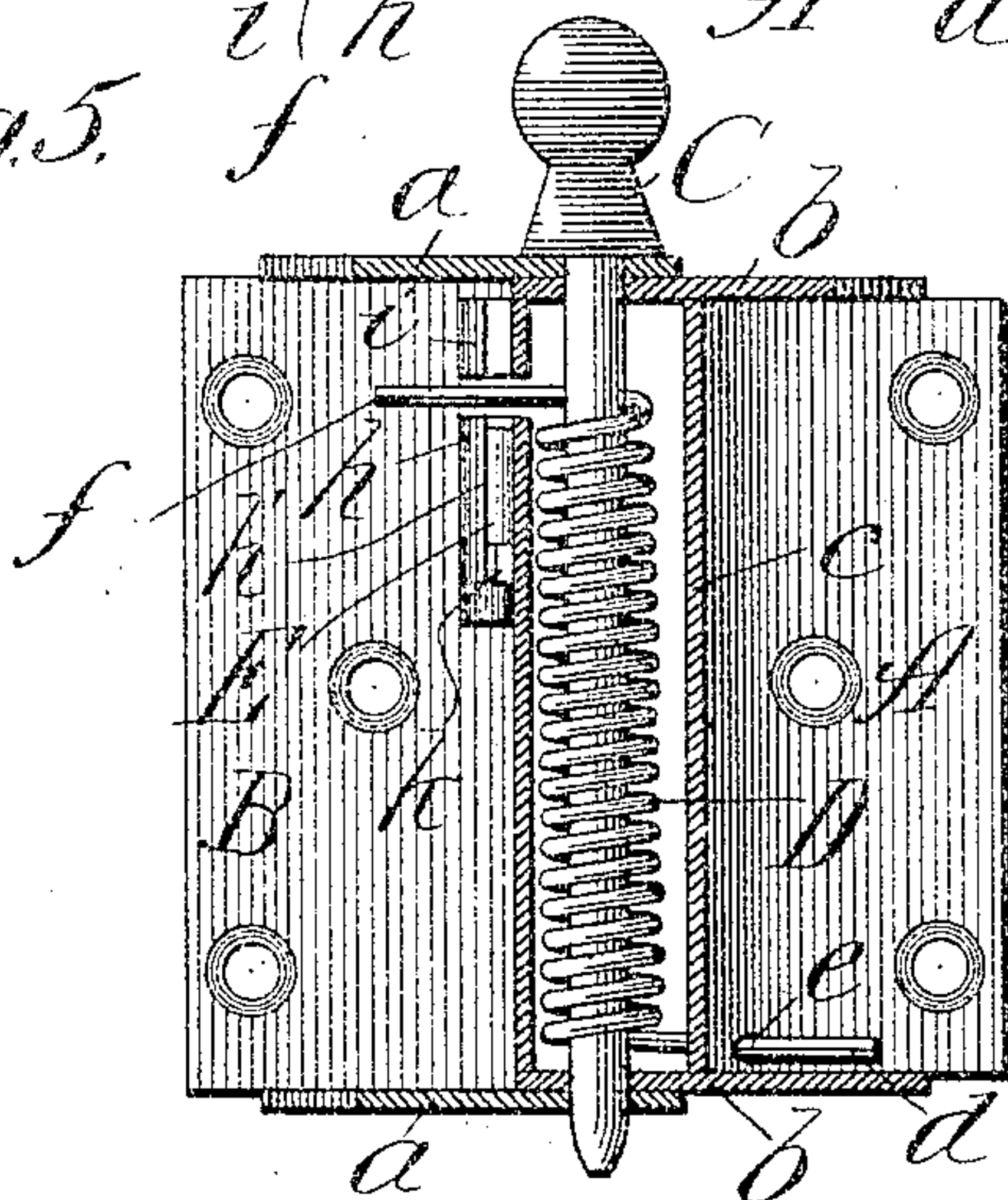
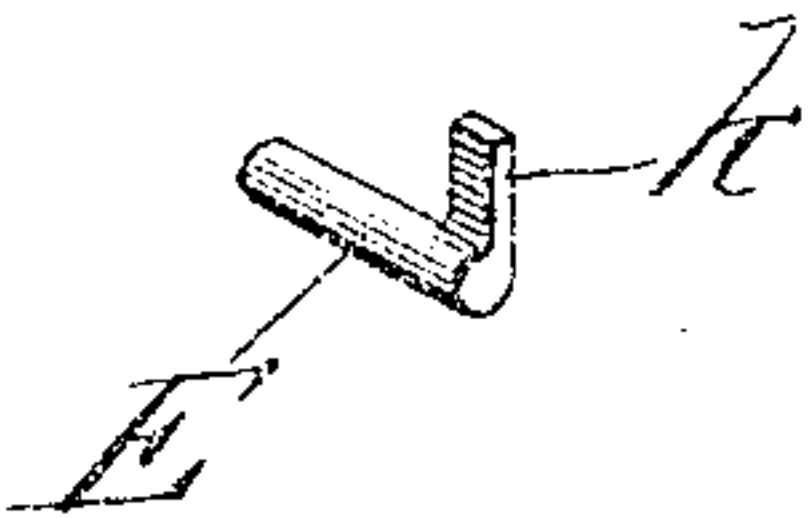


Fig. 6.



Witnesses:
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UNITED STATES PATENT OFFICE.

GEORGE H. SCHIEK, OF JOLIET, ILLINOIS.

SEPARABLE HINGE.

SPECIFICATION forming part of Letters Patent No. 778,509, dated December 27, 1904.

Application filed May 2, 1904. Serial No. 205,915.

To all whom it may concern:

Be it known that I, GEORGE H. SCHIEK, a citizen of the United States, residing at Joliet, in the county of Will and State of Illinois, have invented a new and useful Improvement in Separable Hinges, of which the following is a specification.

My object is to provide a simple, strong, durable, and desirable spring-hinge for use more especially upon screen-doors and of an improved construction which renders it particularly easy to separate and join together when it is desirable to remove or replace the door or the like.

I prefer, for purpose of economy in manufacture, to form the leaves of my improved hinge by stamping them out of comparatively heavy sheet metal, and while the drawings show the hinge formed in this way obviously the leaves may be cast or produced in any other desirable manner.

Referring to the drawings, Figure 1 is a rear elevation of my improved hinge; Fig. 2, a section taken on line 2 in Fig. 1 viewed in the direction of the arrow and showing the spring engaged by the catch; Figs. 3 and 4, inner edge views of the respective leaves of the hinge detached from each other; Fig. 5, a plan section taken on line 5 in Fig. 2, but showing the spring released from the catch; and Fig. 6, a perspective view of a sliding spring-engaging catch of preferred construction.

A B are the companion leaves of the hinge, each formed at opposite ends with ears. The ears *a a* of the leaf or member B overlap the ears *b b* of the leaf A, and the ears are perforated coincidently to receive a removable pintle C, which fastens the leaves pivotally together. The metal of the leaf A is bent longitudinally between the ears *b* into semicircular shape to form a housing *c* for a coiled spring D, which surrounds the pintle. One free end portion, *d*, of the spring passes through a perforation *e* in the housing and rests against the flat surface of the leaf A. The other free end portion, *f*, of the spring bears when the leaves are attached against the flat surface of the leaf B. Extending from the free edge of the housing a desired distance across the

latter in the plane of the end *f* of the spring is a slot *g*, in which the said end moves as the leaves are flexed. On the free edge of the housing at opposite sides of the slot *g* are shoulders or the like *h i*. I prefer to provide the shoulder portion *h* by so cutting and bending the metal as to form a short cylinder closed against the housing at its lower end and leaving above said end a slot *h'*.

E is a catch which I prefer to provide in the form of a sliding pin or bolt, having an offset *k*. The pin E slides freely in the cylindrical guide or shoulder *h*, while the offset *k* projects through the slot *h'*. The shoulder *i* is in line with and may be of the same form as the shoulder *h* to receive the end of the pin E when it is slid across the slot *g*.

When the hinge is in position upon a door, the pressure of the end portions *d f* of the spring tends to extend the leaves and maintain the door closed. When it is desired to detach the door at its hinges, the door is opened far enough to flex the hinges and move the end portion *f* of the spring in the slot *g* past the path of the pin or catch E. Upward pressure against the offset *k* will then slide the catch across the slot *g* beneath the end *f* of the spring. Closing movement of the door causes the end portion *f* of the spring to bear against the catch E as it rests against the shoulders *h i*. This releases the leaf B from engagement by the spring, and the door may be detached by simply removing the pintles of its hinges. To replace the door, the perforations in the ears of the hinges are brought into coincidence and the pintles slipped into place. The door is then opened to cause the leaf B to bear against the end portion *f* of the spring, and thereby release the catch E, which drops out of the path of the spring.

While I prefer to construct my improvements in all details as herein shown and specifically described, various modifications of the construction may be made without departing from the spirit of my invention as defined by the claim.

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

In a separable spring-hinge, the combination of a pair of leaves provided at their ends

with overlapping ears having coincident pin-
tle-receiving perforations, one of said leaves
having a catch-holding shoulder, a removable
pintle passing through said perforations to
5 connect the leaves pivotally together, a coiled
spring about the pintle engaging at its oppo-
site ends said leaves with the end of the spring
engaging one leaf adjacent to said shoulder on

the other leaf, and a catch adjustable on said
shoulder into and out of the path of the end 10
of said spring adjacent thereto, substantially
as and for the purpose set forth.

GEORGE H. SCHIEK.

In presence of—

J. M. MICHAELS,
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