

**No. 704,269.**

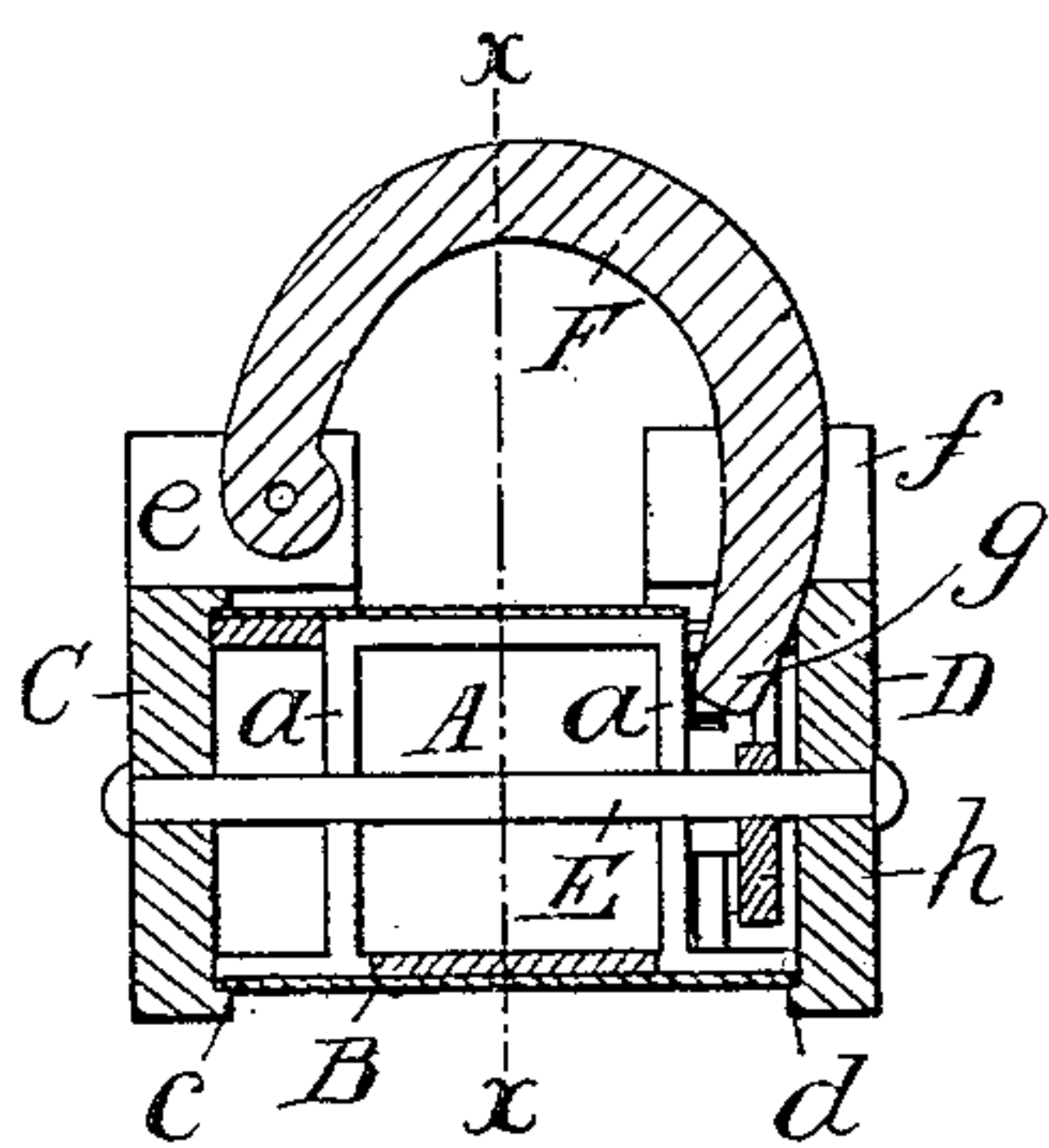
Patented July 8, 1902.

**F. W. PINSON.**

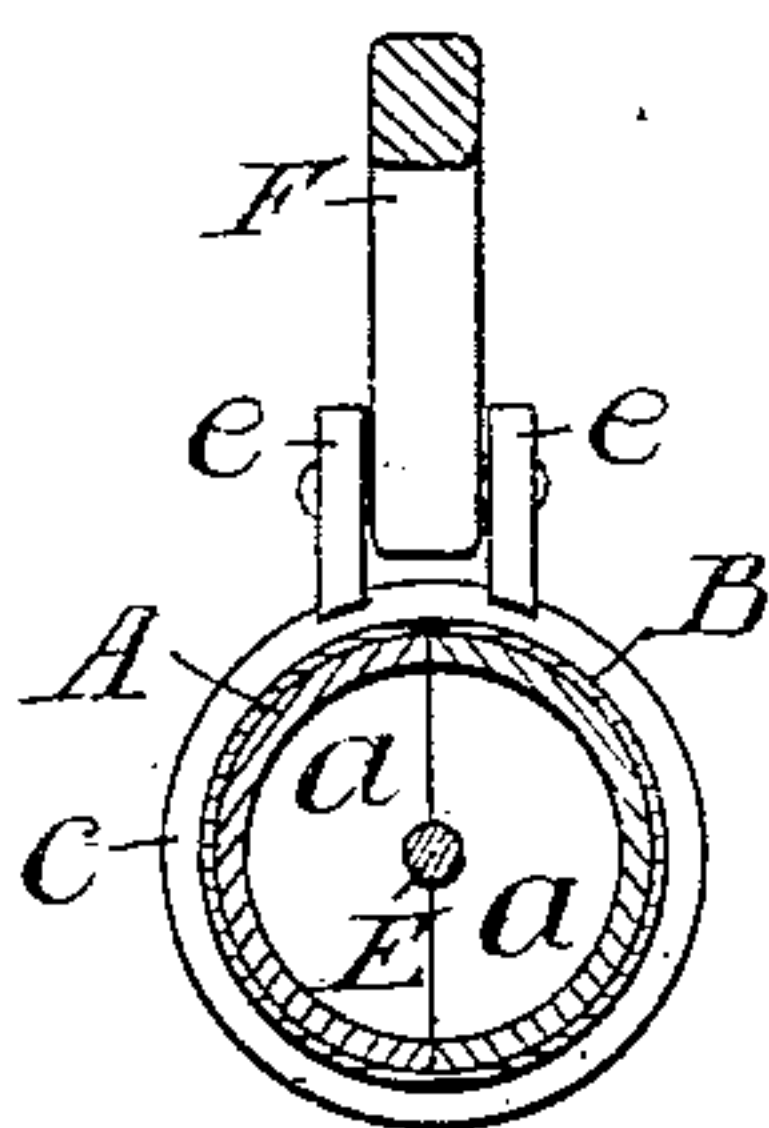
**PADLOCK.**

(Application filed Jan. 9, 1902.)

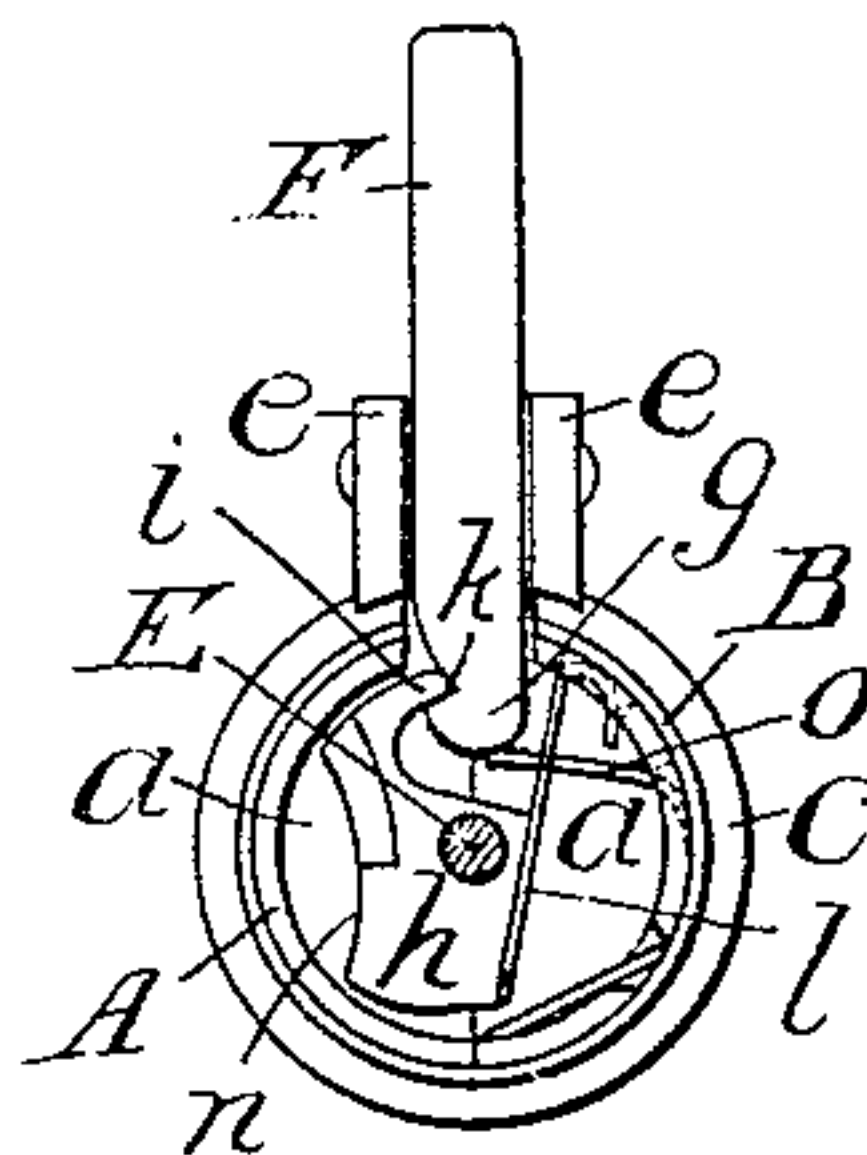
(No Model.)



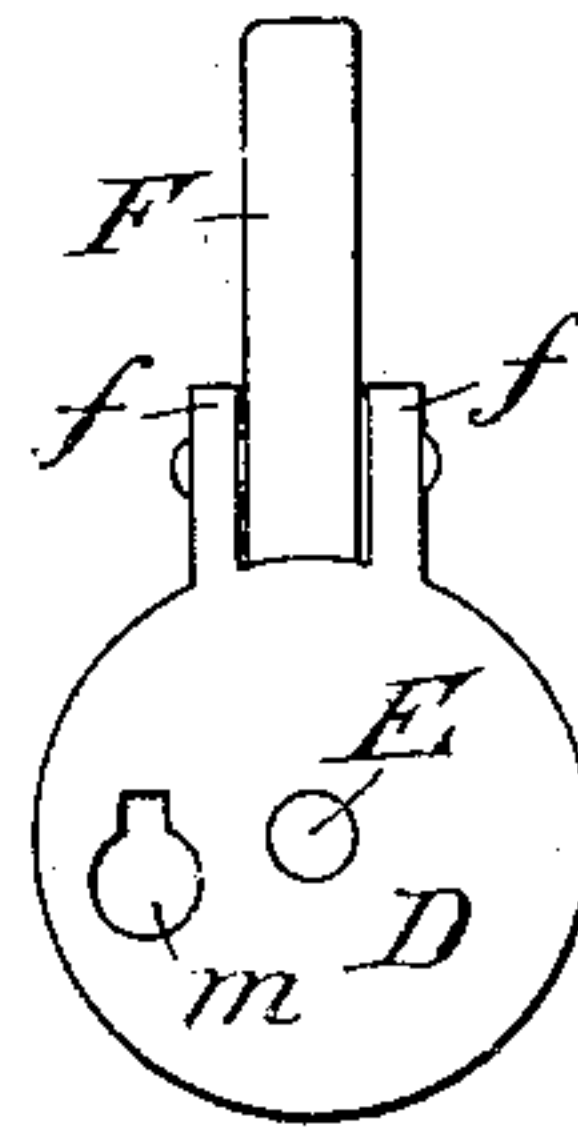
*Fig. 1.*



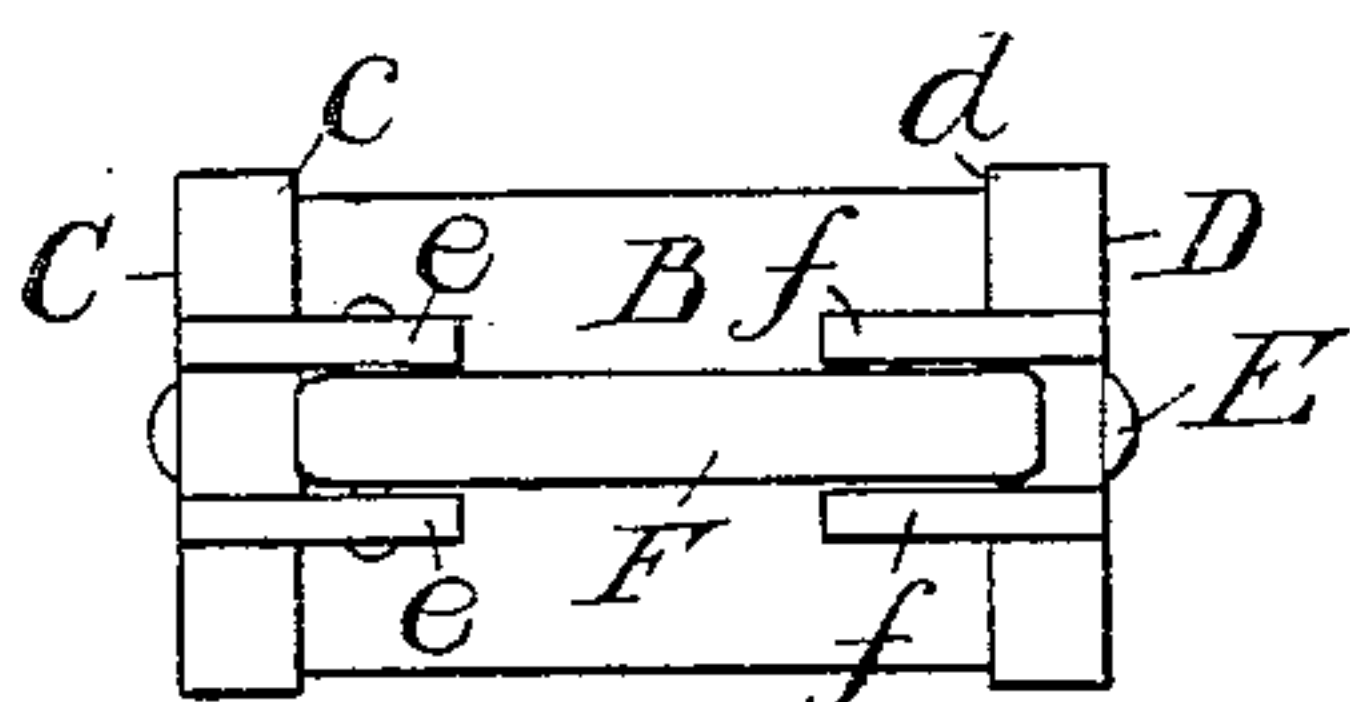
*Fig. 2.*



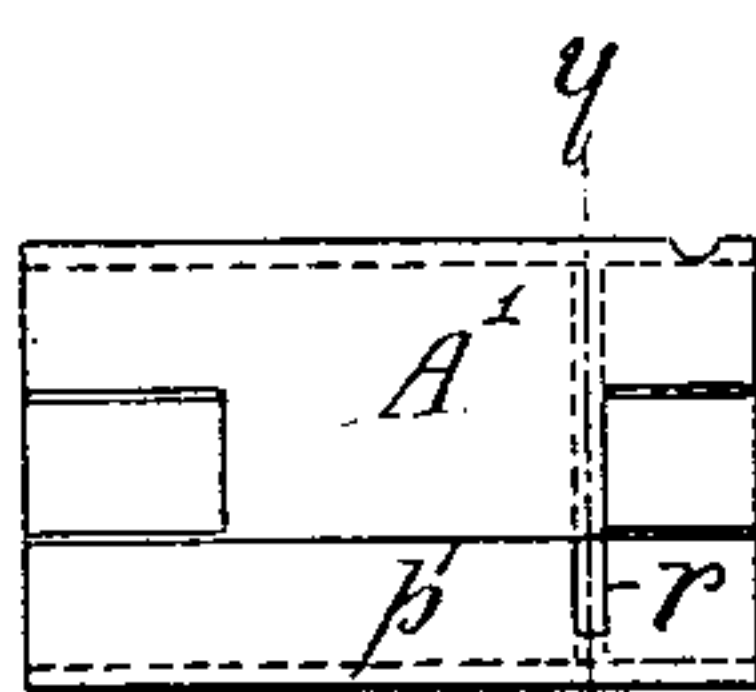
*Fig. 3*



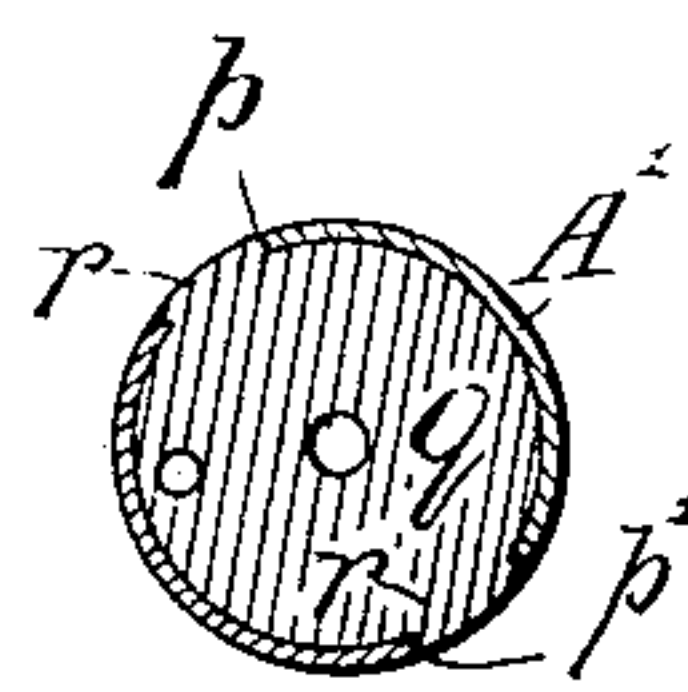
*Fig. 4.*



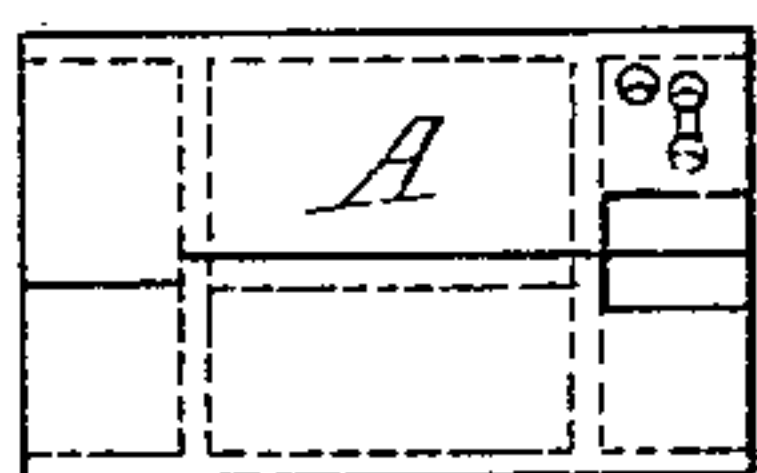
*Fig. 5*



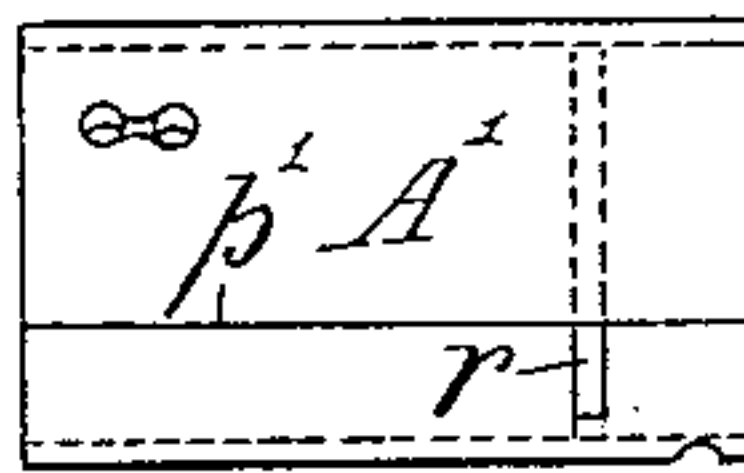
*Fig. 8.*



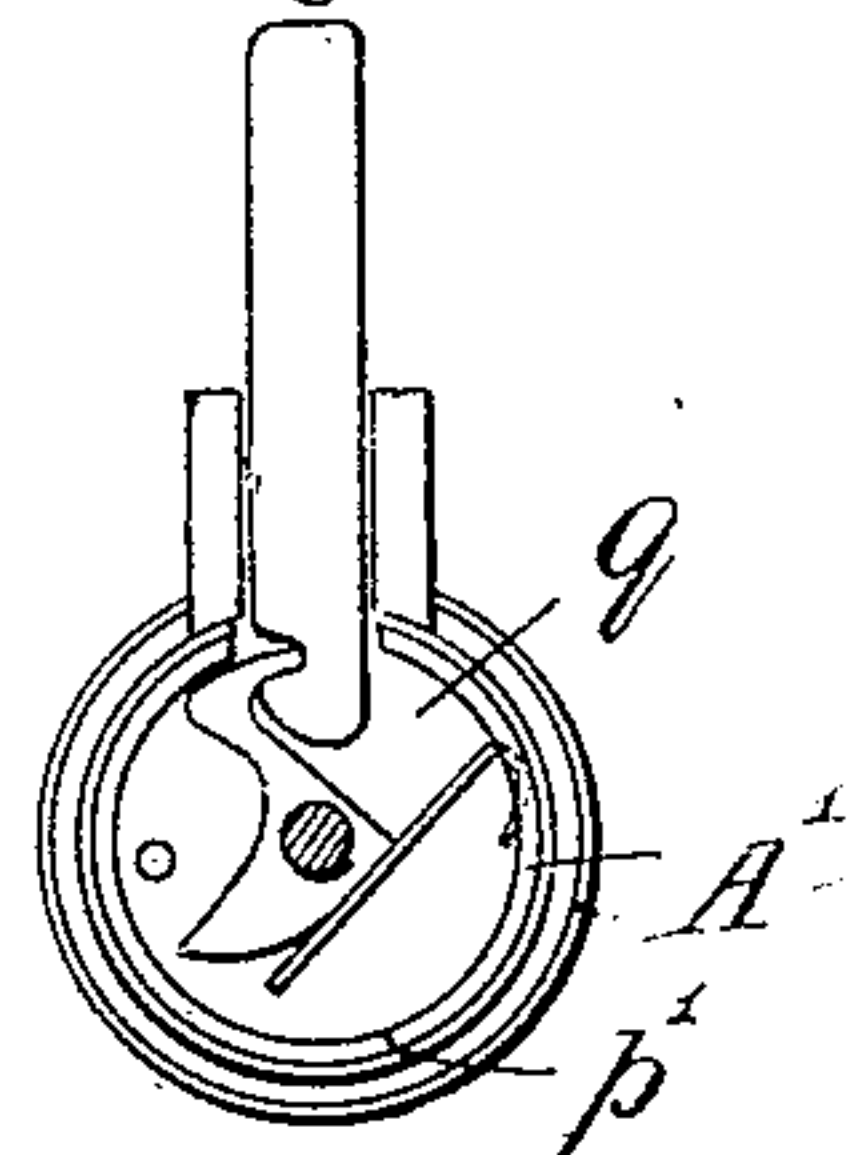
*Fig. 10.*



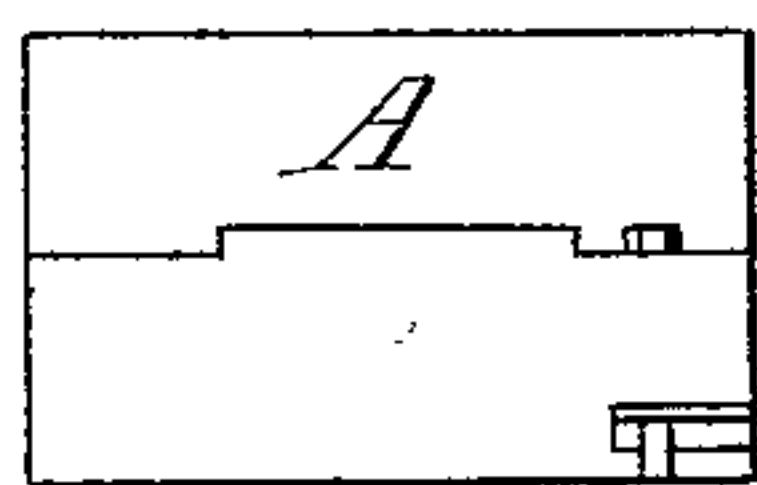
*Fig. 6.*



*Fig. 9.*



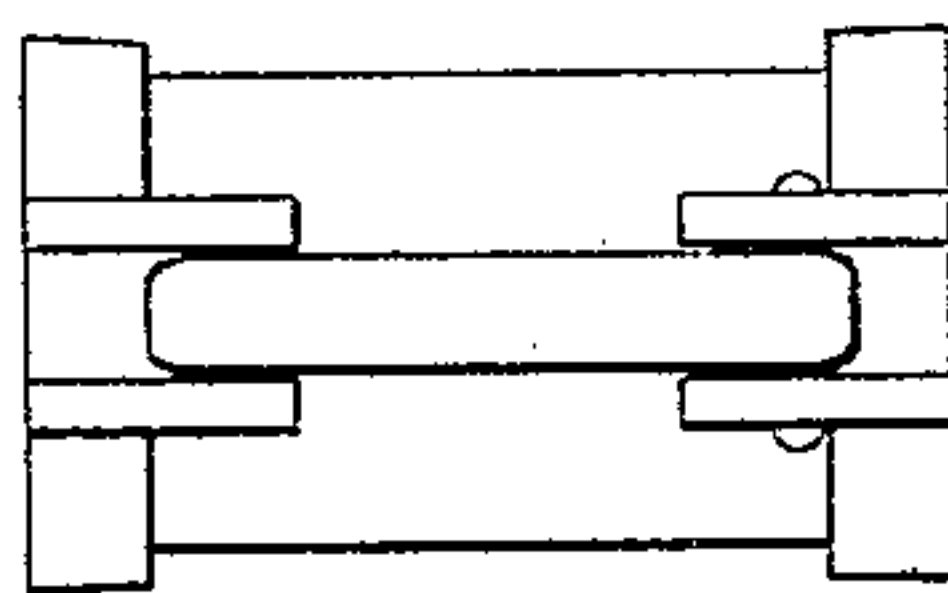
*Fig. 11.*



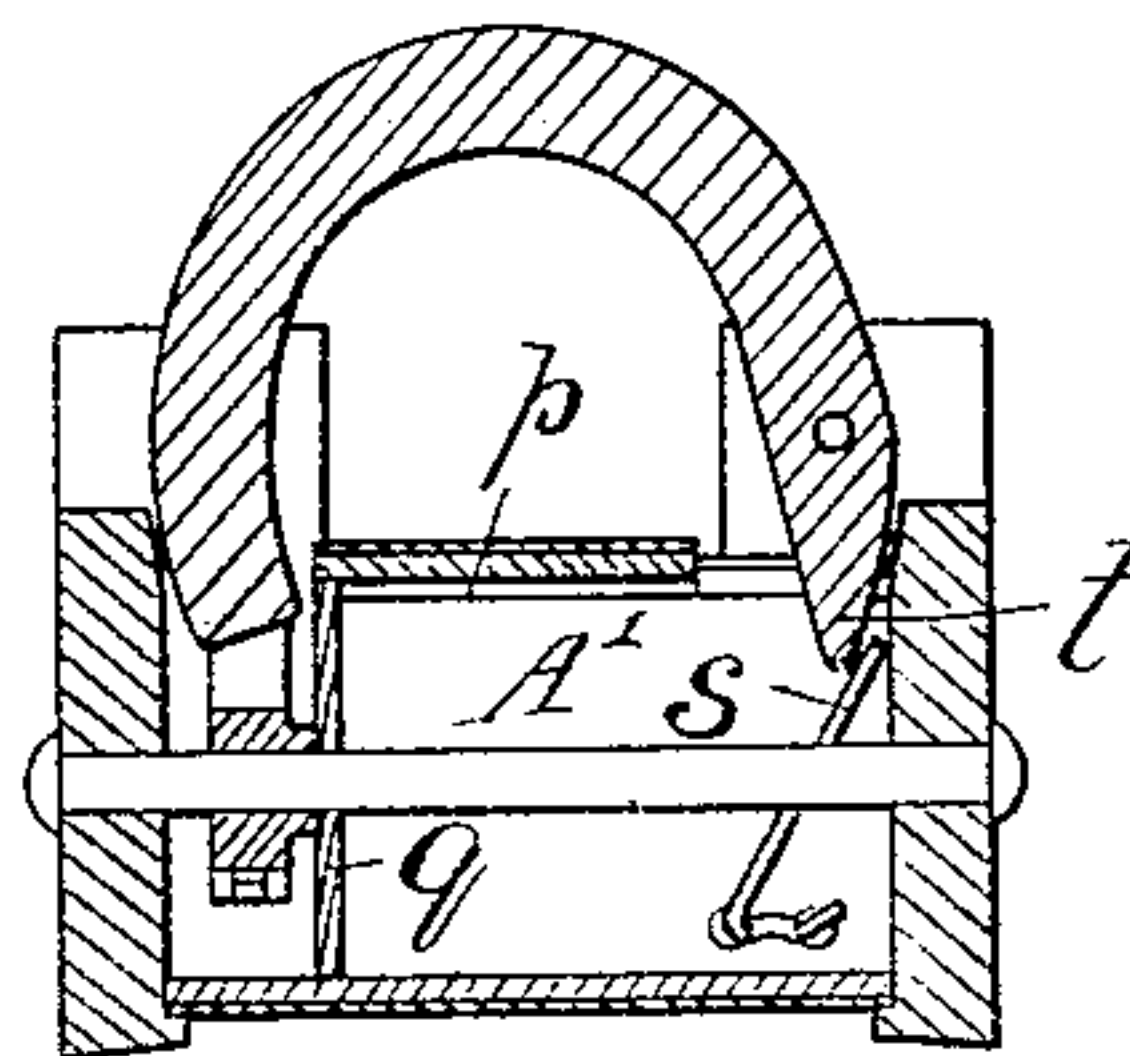
*Fig. 7.*

Witnesses:

J. W. Winman  
Peter A. Ross.



*Fig. 12.*



*Fig. 13.*

*Inventor:*

Frederick W. Pinson  
by Henry Bennett  
Attorney



# UNITED STATES PATENT OFFICE.

FREDERICK WILLIAM PINSON, OF WILLENHALL, ENGLAND.

## PADLOCK.

SPECIFICATION forming part of Letters Patent No. 704,269, dated July 8, 1902.

Application filed January 9, 1902. Serial No. 88,959. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK WILLIAM PINSON, lock manufacturer, a subject of the King of Great Britain, residing at Willenhall, in the county of Stafford, England, have invented certain new and useful Improvements in the Construction of Tubular Padlocks, of which the following is a specification.

This invention has for its object improvements in the construction of what are known as "tubular" padlocks, with a view to facilitate their manufacture, to improve their appearance, and to simplify the mechanism.

The body or tubular portion of the lock is formed in halves lengthwise instead of being cast, as heretofore, in a single piece, and the halves are preferably held together by a sheet-metal casing, which, for the sake of appearance, may be of brass or other superior metal to the body, which will usually be of cast or wrought iron. The end pieces are made separately from the body and are formed each with a rim to surround an end of the sheet-metal case, or, if such case is not employed, to fit around an end of the body to hold the halves together, and the end pieces are securely held together, preferably, by a pin which passes through both of them and along the longitudinal axis of the body.

The locking mechanism comprises a turning piece which is mounted to fit rotatively upon the pin aforesaid and is situated within a chamber at the forward end of the body and has a catch-head for engagement with the free end of the shackle. The turning piece is constantly pressed by means of a spring in a direction to insure its engagement with the shackle when the same is pushed in. The turning piece is moved back by means of a key to disengage it from the shackle.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a longitudinal section through a lock constructed according to this invention with a cast-metal tubular body surrounded by a sheet-metal case. Fig. 2 is a transverse section of such lock, taken on the line  $xx$  of Fig. 1. Fig. 3 is a front end view of such lock with the front end piece removed to expose the mechanism. Fig. 4 is a front end view of such lock. Fig. 5 is a plan view of such lock. Fig. 6 is a plan view of the

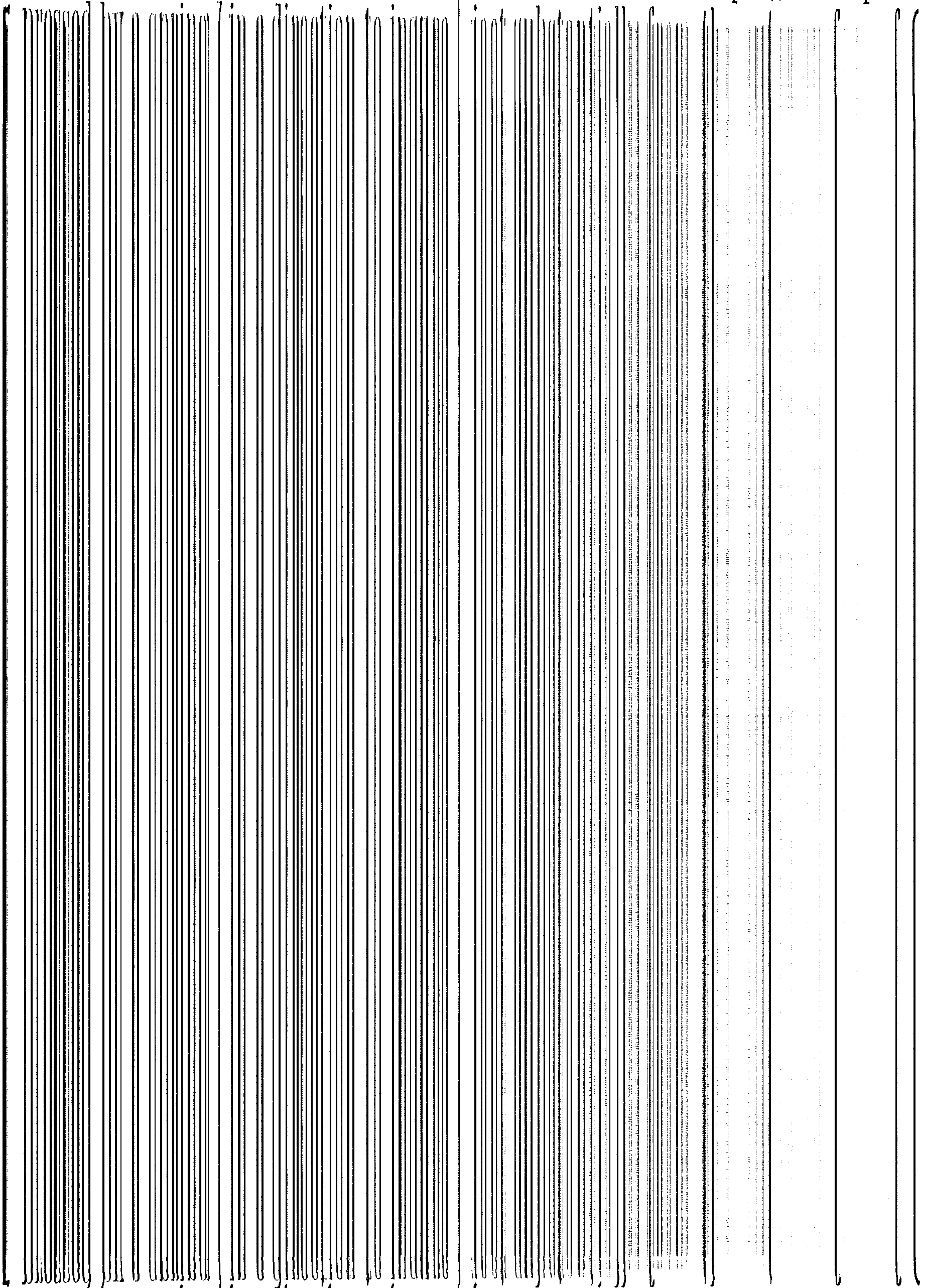
cast-metal tubular body detached. Fig. 7 is a view of the under side of such body detached. Fig. 8 is a plan view of a wrought-metal body for such a lock as shown by Fig. 1. Fig. 9 is a view of the under side of the body shown by Fig. 8. Fig. 10 is a section taken on line  $yy$  of Fig. 8, showing the means of fixing within the body the diaphragm or plate which carries the mechanism. Fig. 11 is a front end view of a lock having the wrought-metal body shown by Figs. 8, 9, and 10, but with the front end piece removed to expose the mechanism. Fig. 12 is a plan view of such lock, and Fig. 13 is a longitudinal section through such lock. This view is shown the opposite way around to all the other longitudinal views, as otherwise the shackle-spring would not appear clearly.

Referring first to the lock illustrated by Figs. 1 to 7, inclusive, A is the tubular body, which is cast in halves longitudinally.  $a$  represents half-diaphragms, two of which are cast with each half of the body. The two forward half-diaphragms  $a$  form the diaphragm or plate which carries the lock mechanism. The forming of the body in halves, as shown, avoids the need for coring out the mold, as when the body is cast, as has heretofore been the case, in a single piece. In Figs. 6 and 7 the line of joint or meeting between the halves is shown to be stepped for the purpose of interlocking the halves together endwise. The halves are preferably sheathed with a cylindrical case B, which may be of brass, copper, or other superior metal, while the body is of iron. The back end C and the front end D of the lock are made separately from the body and each with a rim  $c$  or  $d$ , which surrounds the corresponding end of the sheet-metal case. The end pieces C and D are securely held together by a pin E, which passes through them and along the axis of the lock. The ears  $e$ , by which the shackle F is pivoted to the lock, are formed integral with the back end piece C, and a pair of ears  $f$ , to guide the free end  $g$  of the shackle as it is pushed down into the body, are formed integral with the front end piece D. The locking mechanism, which is shown only by Figs. 1 and 3, comprises a bolt  $h$ , which is mounted to fit rotatively upon the pin E and is situated within the chamber formed between the front end piece D and



the forward diaphragm. The bolt is formed with a catch-head *i* for engagement with a sidewise notch *k*, which is formed in the free end *g* of the shackle. The bolt is constantly

by passing its two legs through two holes of the body, the metal of the body between the holes may be pushed somewhat inward to insure that the metal of the spring will not pro-



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