

(No Model.)

A. PRANKE.
SHUTTER WORKER.

No. 438,426.

Patented Oct. 14, 1890.

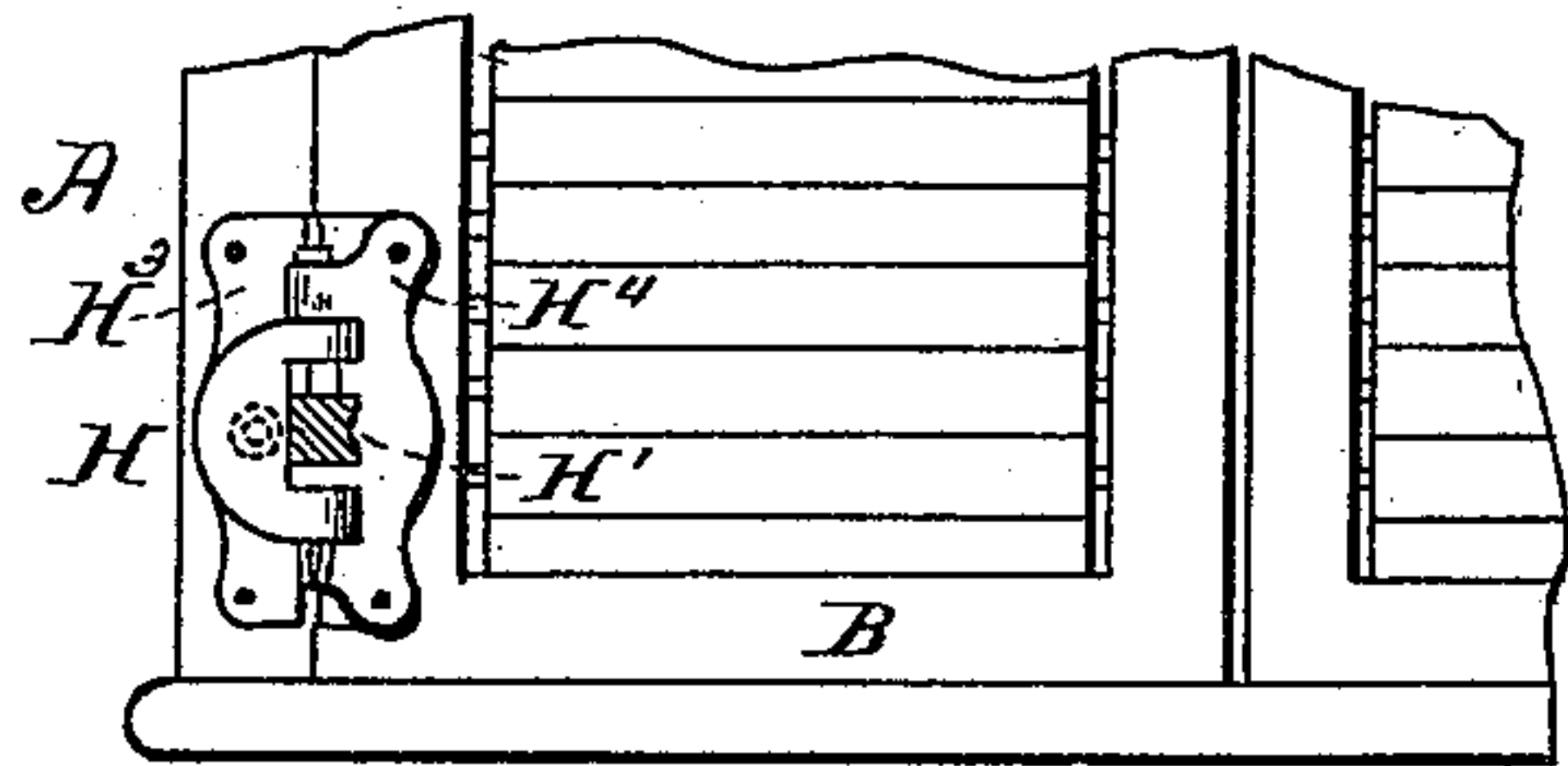


Fig. 1.

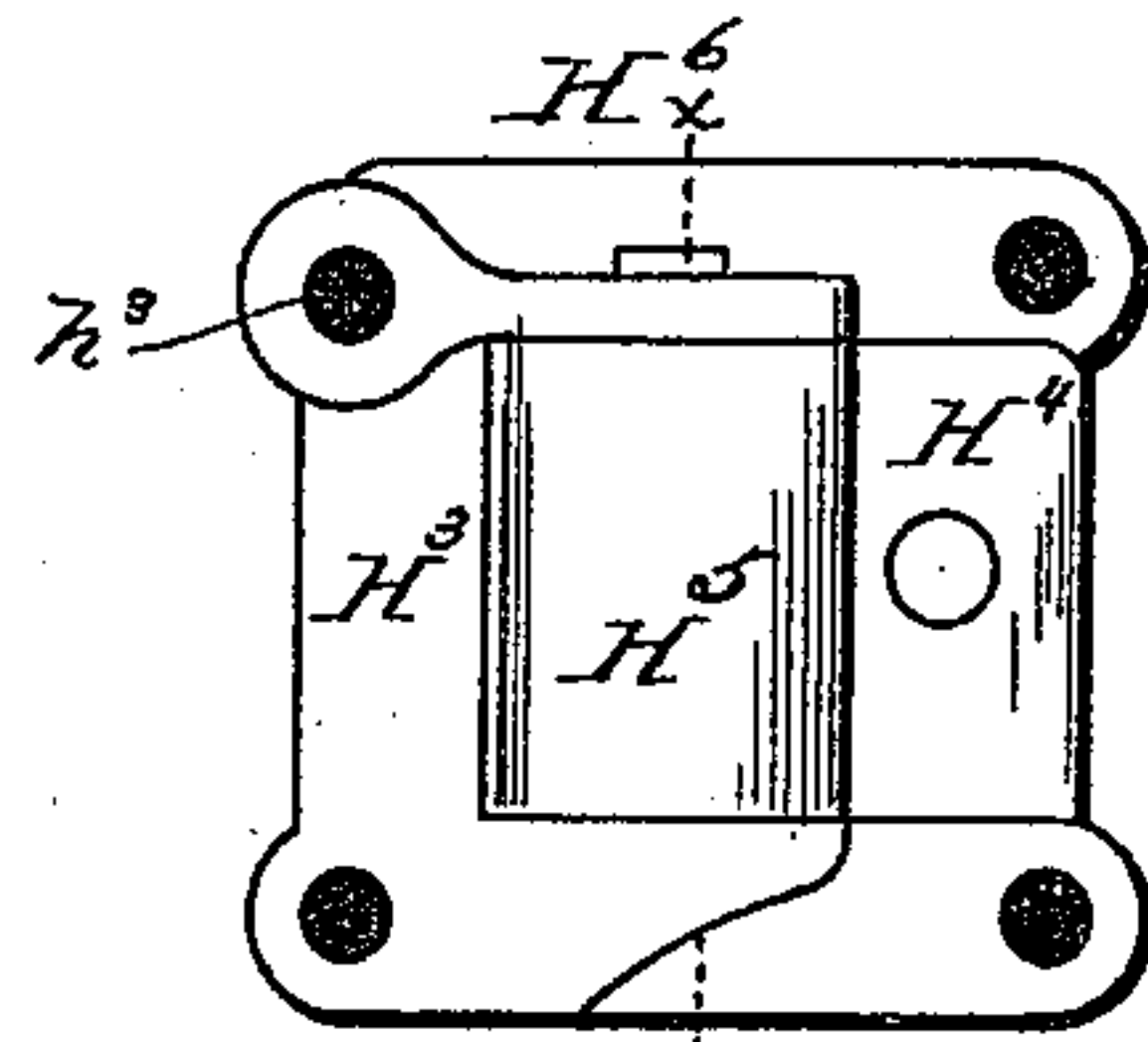


Fig. 3.

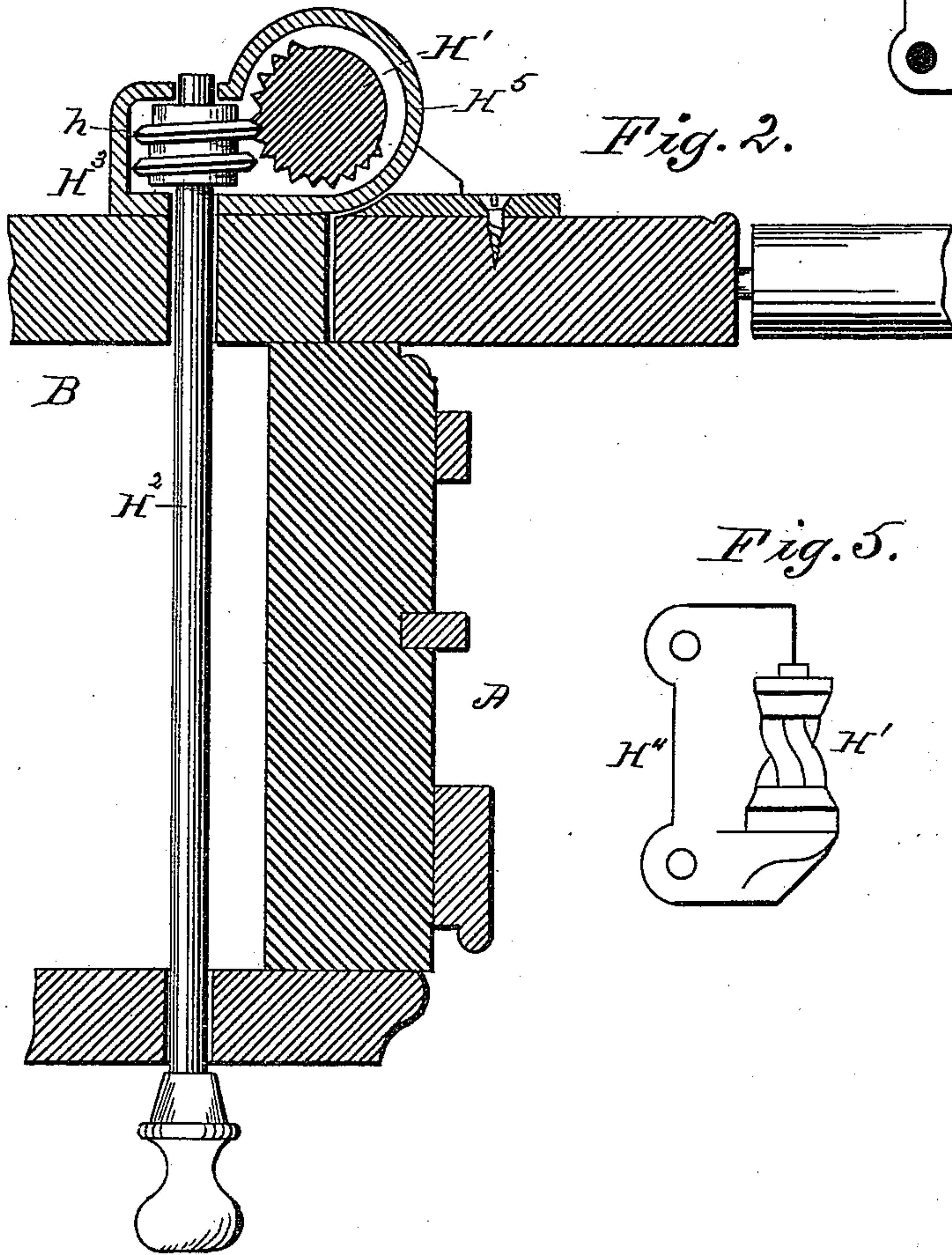


Fig. 2.

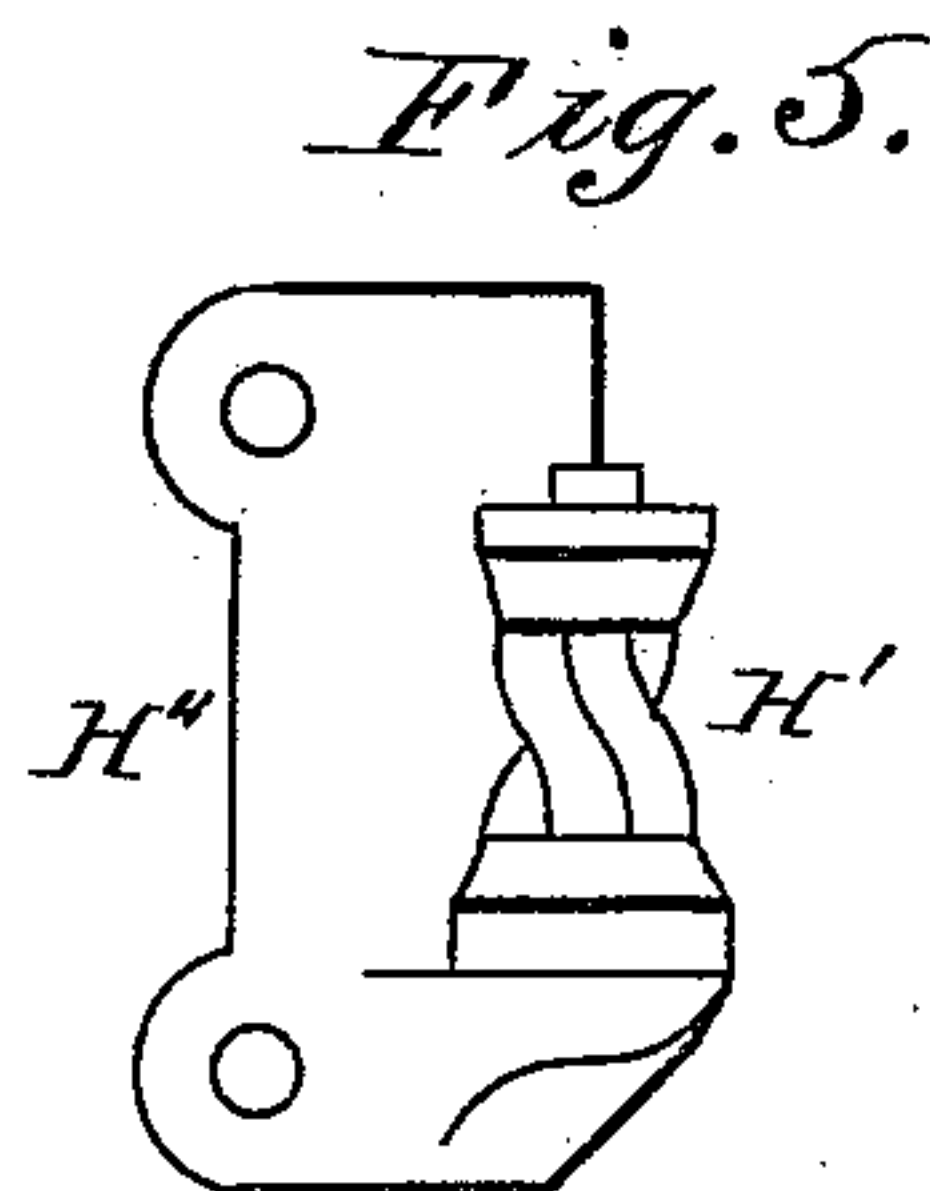


Fig. 5.

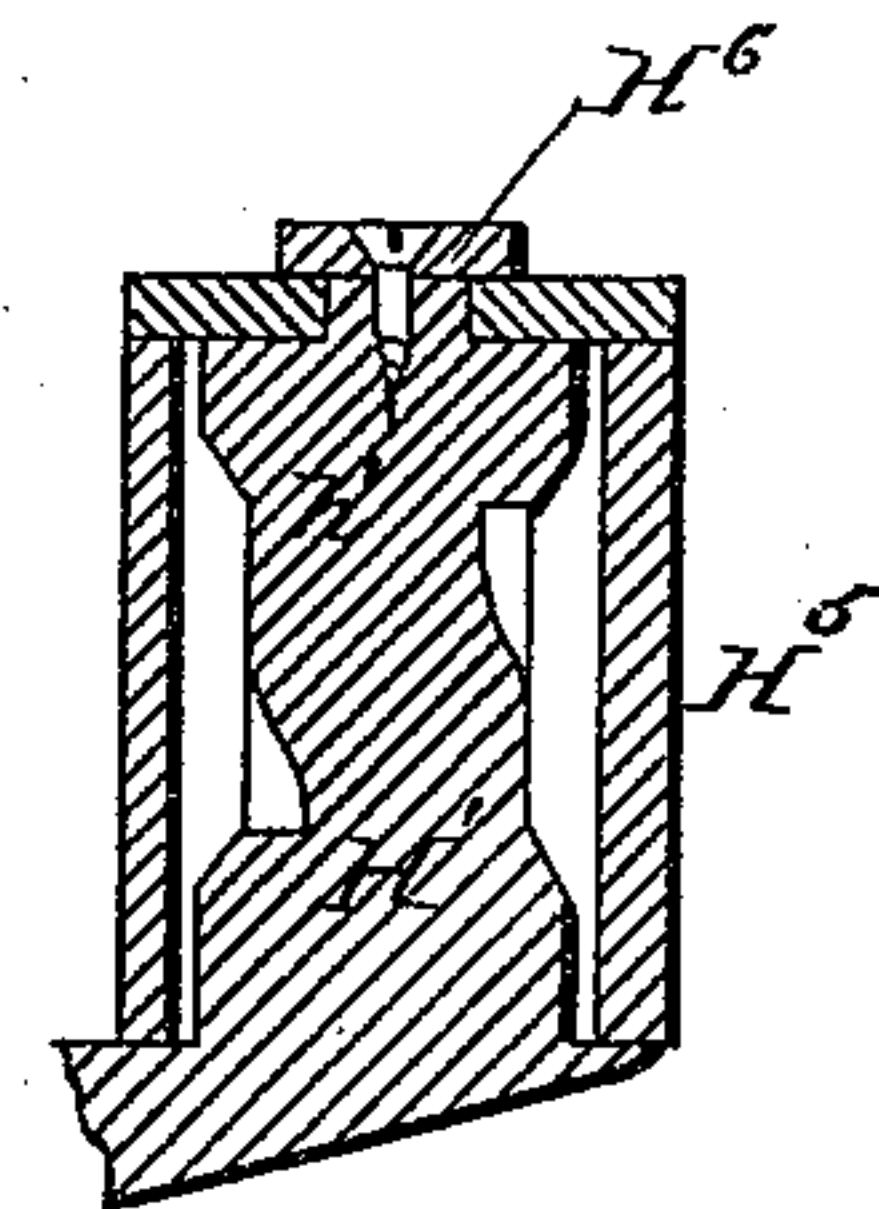


Fig. 4.

Witnesses

W. B. Harris
Benj. E. Cowl

Inventor
August Pranke
Newell S. Wright Atty.
By Brown & Seward
Assn. Attorneys

UNITED STATES PATENT OFFICE.

AUGUST PRANKE, OF DETROIT, MICHIGAN.

SHUTTER-WORKER.

SPECIFICATION forming part of Letters Patent No. 438,426, dated October 14, 1890.

Application filed May 10, 1890. Serial No. 351,364. (No model.)

To all whom it may concern:

Be it known that I, AUGUST PRANKE, a citizen of the United States, residing at Detroit, county of Wayne, and State of Michigan, have
5 invented a certain new and useful Improvement in Shutter-Workers; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains
10 to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to certain new and useful improvements in shutter-workers; and
15 it consists of the combinations and arrangements of devices and appliances hereinafter set forth and claimed, and more particularly illustrated in the accompanying drawings, in which—

20 Figure 1 is a front elevation showing features of my invention with parts broken away or removed. Fig. 2 is a horizontal section showing portions of the invention. Fig. 3 is a separate view of the hinge in front elevation. Fig. 4 is a section thereof on the line
25 X X, Fig. 3. Fig. 5 is a separate view of one of the straps.

The object of my invention is to provide means for opening and closing a shutter from
30 the inside of a room without the necessity of opening the window or removing a screen, should there be one used, the means themselves being simple, economical, and efficient.

I carry out my invention as follows:

35 A represents a window-casing; B, a shutter or blind to be operated.

H denotes one of the hinges uniting the shutter or blind to the casing, and provided with a toothed spindle or worm gear H', having
40 a stationary engagement therewith. H² is an operating-rod extending through the casing to the interior of the building, and provided at its outer end with a gear h, meshing with the gear H'. By turning the operating-rod
45 H² it is evident that the blind or shutter can be opened or closed as desired and in a ready manner. This hinge I prefer to construct with the worm as an integral part of one of the straps thereof. To this end, as shown in
50 Figs. 1 and 3, H³ and H⁴ denote the two straps of the hinge, the worm H' being formed with

the strap H⁴ in a single piece. The strap H³ is constructed with a housing H⁵ for the gears H' and h, the housing being an integral part of said strap. To unite the two straps, the
55 gear H' is located in the housing, and a separate arm H⁶ is united therewith, as by a screw h'. The other end of said arm is engaged upon one of the straps, as by a screw passed through a perforated shoulder h³ and said
60 strap, the same screw being employed to secure the hinge upon the blind or window frame, as the case may be.

With devices of the constructions herein described there is no rattling of the blind or
65 shutter.

The gear H' need be but a segment, as shown in Fig. 2.

By thus uniting the gears with the hinges they are brought into compact form and can
70 be applied readily to any blind or shutter.

What I claim as my invention is—

1. The combination of a blind or shutter hinge consisting of two straps pivoted together, one of which is provided with a gear
75 formed integrally therewith, a bar pivoted to said gear, and the gear-strap to steady and serve as a journal for said gear, in combination with a spindle and a gear connected thereto and meshing with the first-named
80 gear, by which the latter is caused to rotate, substantially as set forth.

2. In a blind or shutter worker, the herein-described hinge, consisting of two straps, one of which is provided with a gear extending
85 vertically from one end of the strap and the other strap provided with a housing open at one end to receive and conceal said gear and having a pivotal engagement therewith, in combination with a spindle having fixed
90 thereto a gear, which is also located and concealed within said housing and in engagement with the first-named gear, and a fastener securing said first-named gear in said housing,
95 substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

AUGUST PRANKE.

Witnesses:

N. S. WRIGHT,
CHAS. F. SALOW.