

No. 679,023.

Patented July 23, 1901.

A. HELLER.

AUTOMATIC LOCKING DEVICE FOR DOORS, &c.

(Application filed Sept. 29, 1900.)

(No Model.)

Fig. 1.

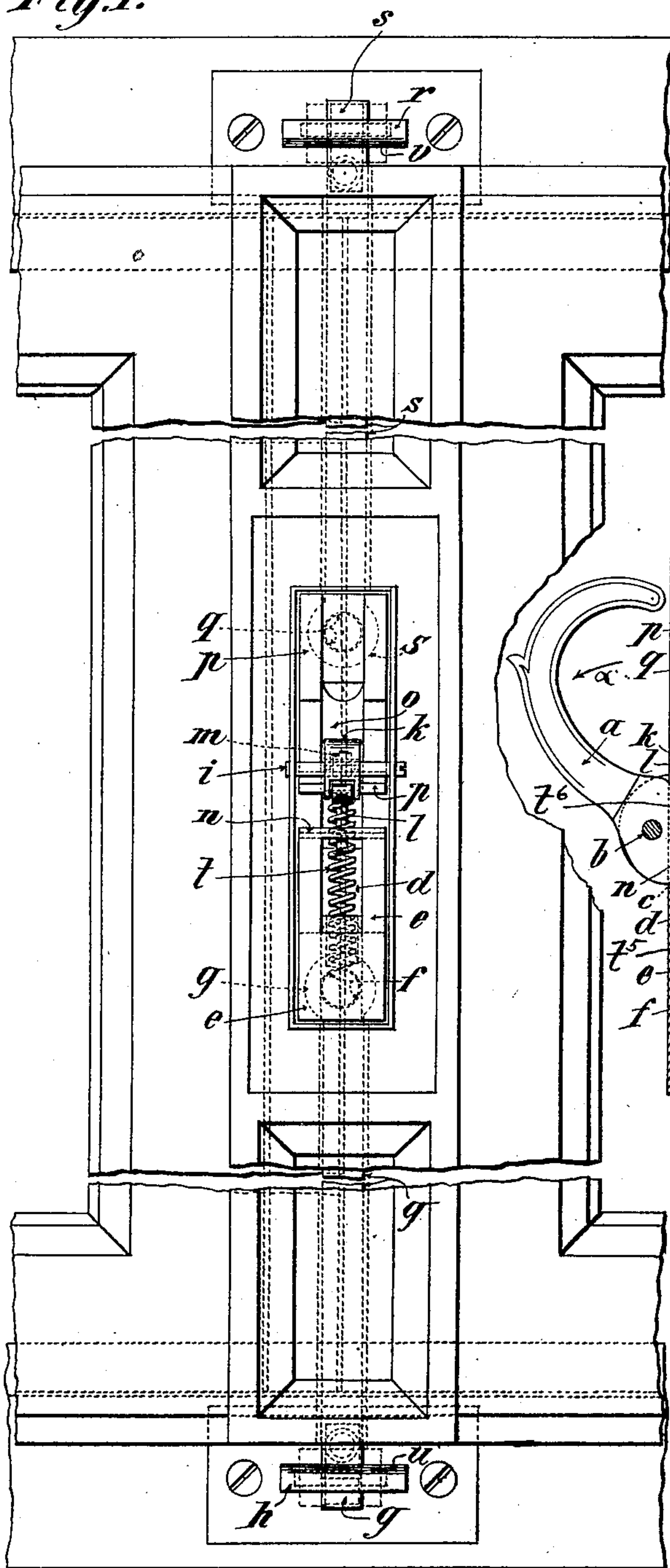
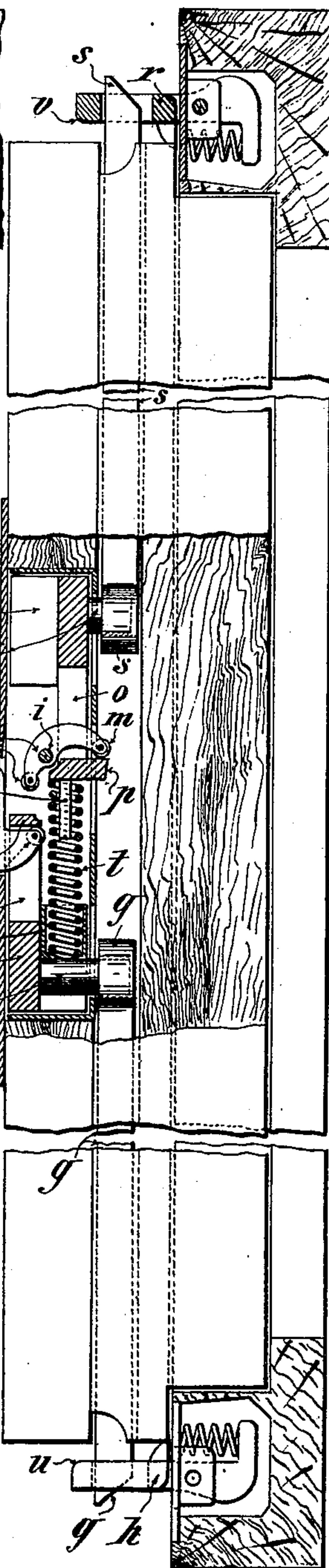


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

AUGUST HELLER, OF GRAZ, AUSTRIA-HUNGARY.

AUTOMATIC LOCKING DEVICE FOR DOORS, &c.

SPECIFICATION forming part of Letters Patent No. 679,023, dated July 23, 1901.

Application filed September 29, 1900. Serial No. 31,552. (No model.)

To all whom it may concern:

Be it known that I, AUGUST HELLER, rent-owner, a citizen of Austria, residing at Graz, Province of Styria, Austria-Hungary, have
5 invented certain new and useful Improvements in Automatic Locking Devices for Doors, &c., and all Kinds of Roller-Doors, of which the following is a specification.

The present invention relates to a locking
15 device for doors and window-leaves and all kinds of roller-doors; and the object is to provide a simple and efficient mechanism of the character described which will also be inexpensive in construction.

In the accompanying drawings such a locking
20 device for windows, with leaves turnable in pivots, is represented in Figure 1 in front view, and in Fig. 2 in side view, vertically sectioned.

a is a suitably-shaped lever rotatable on a
25 pin b in the direction of the path of the leaves. This lever is provided on its shorter arm with a pulley C , guided in the slot d of the sliding piece e , the latter being connected by means of a tenon f to a rod or bolt g , which engages
the keeper h on the lower edge of the frame. This keeper may be fixed or movable. When
movable, it is adjustable by a spring.

On the pin i is pivoted a two-armed short
30 lever k , provided with friction-rollers l and m on its ends and resting with one end on the sliding piece e , while the other end engages the slot o in the other sliding piece p , which is connected by the bolt q to a rod s ,
35 engaging the upper keeper r .

t indicates a spiral spring, the lower end of
40 which is seated in a socket t^5 , mounted or bearing upon the tenon f , projecting from the sliding piece e , while the upper end of the spring encircles a stud t^6 , depending from the lower end of the sliding piece p . It will thus
be seen that the normal tendency of the spring is to keep the sliding pieces pressed apart or
separated vertically.

45 The mechanism operates as follows: When in locking position, the two sliding pieces e and p are separated by the spiral spring t —

i. e., the sliding piece p is pressed upwardly, and the other, e , downwardly in such a manner
that the bolt-rods g and s enter the keepers. 50
When this device is used for sliding windows or roller-doors, the arrangement is horizontal, and one of the bolt-rods enters in the corresponding slot of the frame on the right and
the other on the left. When the handle or 55
the ring is drawn in a direction vertical to the plane of the window or door, this handle turns on the pin b in the manner indicated by the arrow x in Fig. 2 and raises or moves with its
pulley c , the sliding piece e , and therefore also 60
the lower bar. During its movement the sliding piece presses with the end n on the lever-arm, which bears the friction-roller, so
that the lever k is turned on the pin i and
displaces the sliding piece p and the bolt s by 65
means of its friction-roller. By this movement the bolts are disengaged from the keepers, and the leaf can be opened, lowered, or
raised. When the leaf is to be closed, it is
sufficient to press it back or to lower it, where- 70
by the bevel ends of the bolts g and s bear on the front ends n and v of the keepers h and r and then move against each other and
engage the bolts. When the leaf is closed
in this simple manner, the spiral spring t , act- 75
ing on the sliding pieces e and p , keeps the mechanism in the locking position.

I claim—

A locking device consisting in the combination with a rotatable lever, of a sliding 80
piece e , a bar g connected with the sliding piece, a second sliding piece p , a second sliding bar s , a spring arranged to act upon the said sliding pieces e and p to normally keep
the same separated, as described, a pivoted 85
lever k , and the keepers h and r , all arranged for coöperation as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

AUGUST HELLER.

Witnesses:

WILHELM ZERGER,
ALVESTO S. HOGUE.