(No Model.)

G. W. STEELE.

SHADE FIXTURE.

No. 298,128. Patented May 6, 1884.

Fig 1

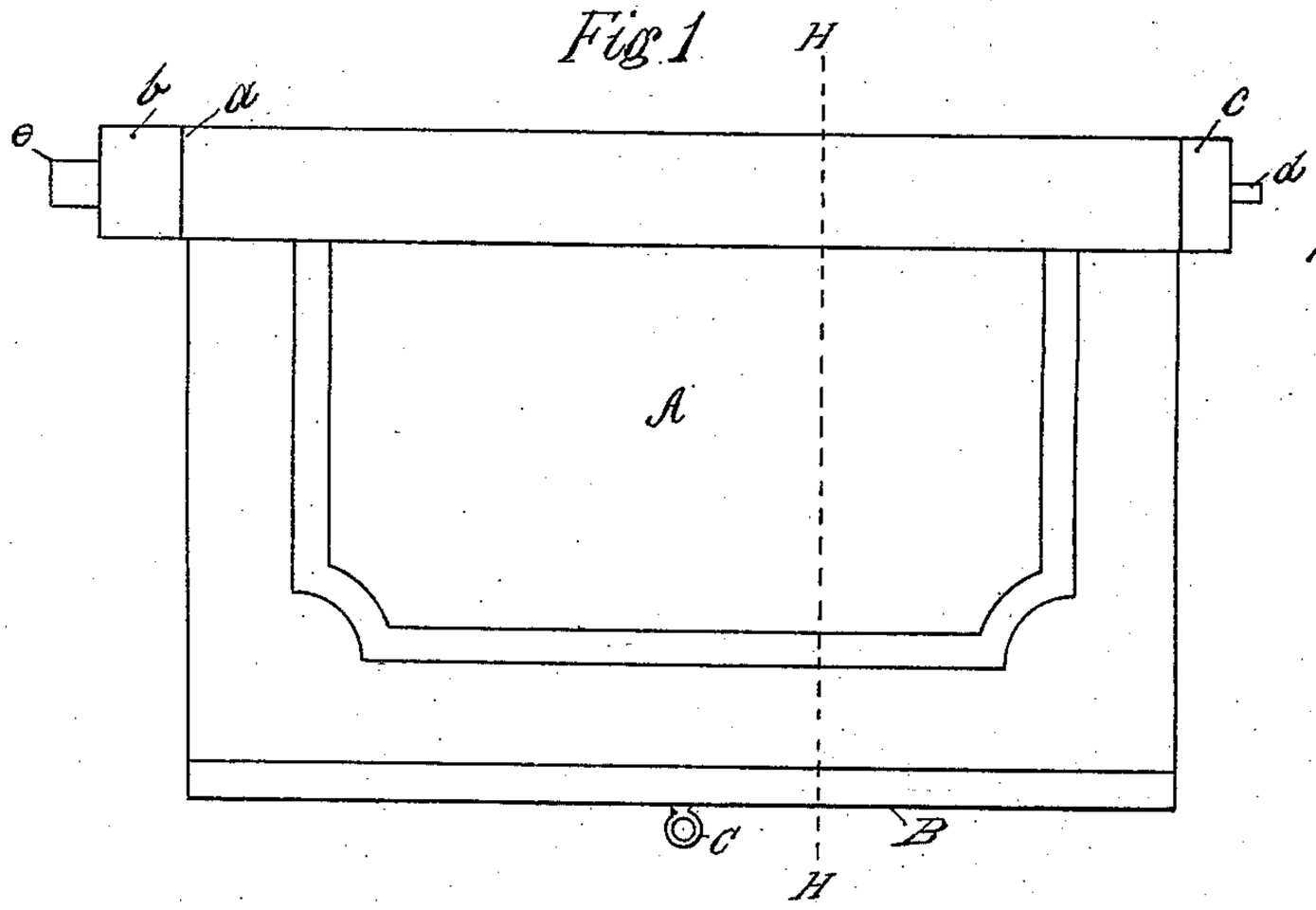


Fig 2

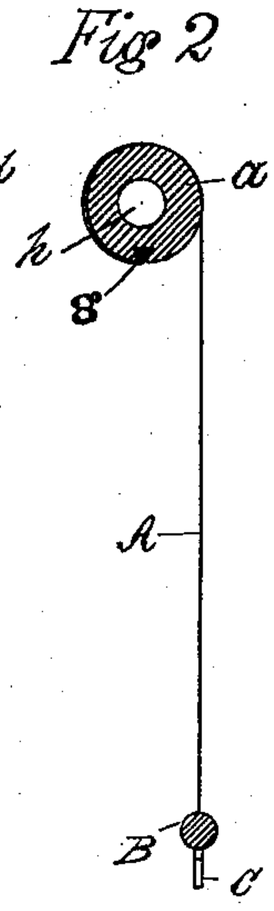


Fig 3

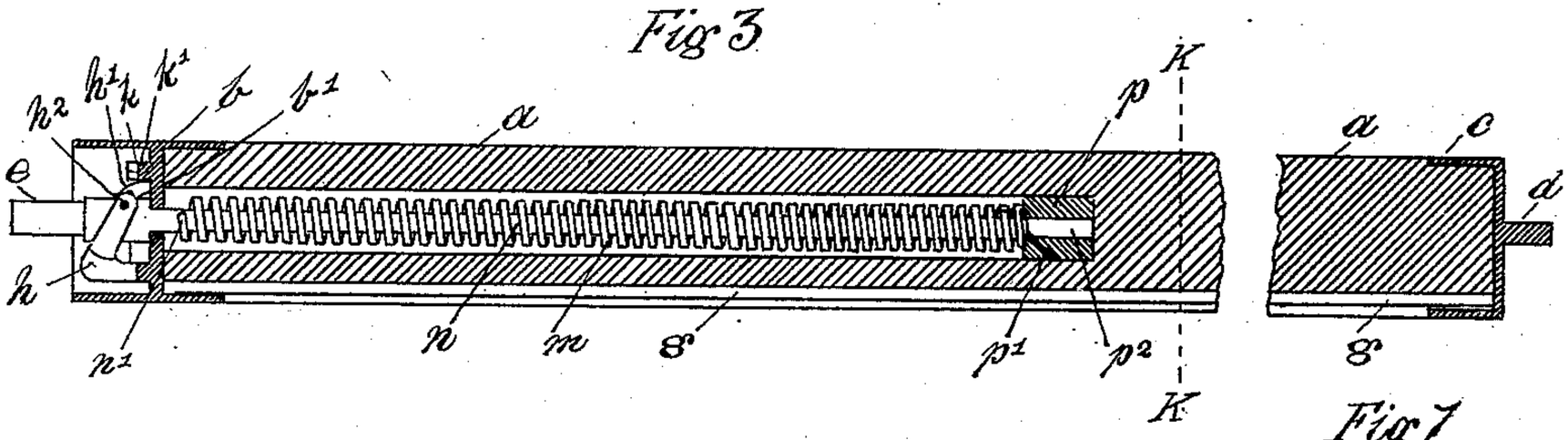


Fig 4

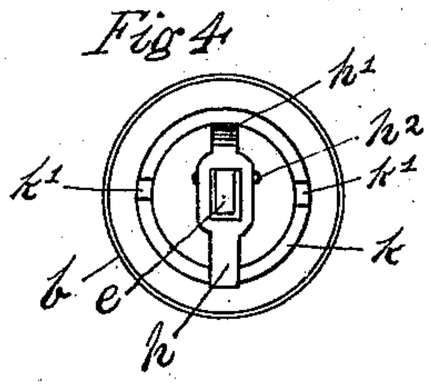


Fig 5

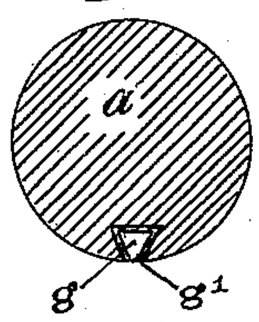


Fig 6

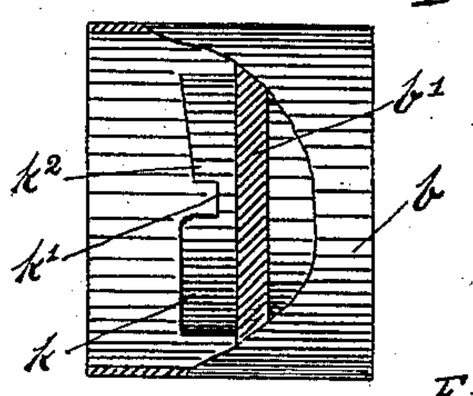


Fig 7

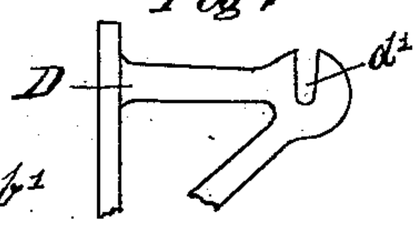


Fig 8

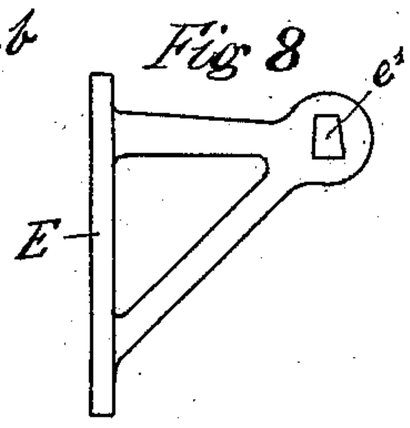
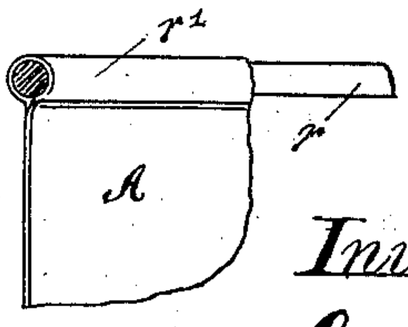


Fig 9



Witnesses

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UNITED STATES PATENT OFFICE.

GEORGE W. STEELE, OF PATERSON, NEW JERSEY.

SHADE-FIXTURE.

SPECIFICATION forming part of Letters Patent No. 298,128, dated May 6, 1884.

Application filed September 11, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. STEELE, a citizen of the United States, residing at Paterson, Passaic county, State of New Jersey, have invented a new and useful Improvement in Shade-Fixtures, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

The object of my invention is to produce a curtain or shade roller of new and simple construction wherein by the use of a single pawl, in combination with a lock-plate, rod, spring, and detachable plug, the roller is automatically locked and held in any desired position, whether in or out of the brackets, which will be hereinafter more fully explained.

Figure 1 of the drawings is a front view of the shade on the roller. Fig. 2 is a section on line H H of Fig. 1. Fig. 3 is a longitudinal section showing roller broken and an arrangement of devices. Fig. 4 is an end view of roller and operating devices. Fig. 5 is a section on line K K of Fig. 3. Fig. 6 is a view of lock plate and band, part sectional. Fig. 7 is a bracket for the pin. Fig. 8 is a bracket for the rod, and Fig. 9 is a front view of shade and cord.

e represents a rod the inner part of which is cylindrical, and is provided with a helical or spiral spring, *m*, which surrounds the cylindrical part *n* of the rod *e*, being longitudinally arranged thereon. The inner end of the spring *m* is secured in a detachable plug, *p*, at *p'*, and the opposite end in the rod at *n'*, the plug *p* serving as a bearing for the inner end of the rod *e*, as shown in Fig. 3. The roller *a* is bored out in the usual way, and the rod *e* inserted, as shown. The outer end of the rod *e* is constructed with flat sides, the lips of which project somewhat over the cylindrical part of the rod and form shoulders against the lock-plate *b'*. The lock-plate *b'* is constructed with lugs *k* and k^2, which lugs are formed on the outer end or edge of the band of the lock-plate, which band or flange projects over the disk. The lugs *k* k^2 so formed on the end or edge of the projection or flange have inclined surfaces, at the ends of which inclines so formed on the lugs *k* k^2 are arranged notches *k'*. The lock-plate *b'* may be secured to the end of the roller by any of the known means employed therefor.

To the side of the rod *e*, and outside of the lock-plate, there is suitably pivoted a pawl, *h*, the inner lower end of which is arranged to be in continual engagement with the lugs *k* and k^2. The upper inner end of the pawl, which is vertically arranged on the rod *e*, rests against the face of the lock-plate.

In practice the curtain or shade is secured to the roller by any of the known means employed therefor, the brackets are placed in position in the usual way, the roller cut to the desired length, and the plate *c*, having the pin *d*, secured thereto, the curtain or shade A is rolled up and the rod *e* placed in the slot *e'* in the bracket, and the pin *d* in the notch *d'*. The curtain or shade is drawn downward by the hand, which action puts the spring *m* in tension. The engagement of the pawl *h* with the inclined rising surfaces of the lugs *k* k^2 distends the spring *m* longitudinally outward, which causes the inner top end of the pawl *h* to impinge hard against the disk of the lock-plate, so that when the pawl *h* passes over the end of the lugs *k* and k^2 and reaches the notches *k'* the spring *m*, which is distended by the action of the lugs *k* k^2 on the pawl and rod, suddenly contracts, which action forces the engaging end of the pawl *h* into the notches *k'*, which locks the roller *a*, and prevents its further rotation until the same is manipulated by the curtain or shade in the ordinary way of raising and lowering the same, and when so raised the inclined part of the lugs *k* k^2 will raise the engaging part of the pawl *h* above the opposite lug sufficiently high to cause the pawl to pass over the notches *k'* if a quick motion be given to the roller. The inclined lips of the lugs *k* k^2 are rounded off from the bottom of the notches *k'* upward to admit of the pawl's raising out of the notch when lowering the shade. The band *b* projects over the end of the roller sufficiently to protect the devices. The ribs and grooves for fastening the curtain are as shown.

I am aware that a rod of similar construction has been in use in curtain-rollers, the same

having a swinging pawl attached thereto ; but swinging pawls are objectionable, for the reason that they are often obstructed and fail to act.

Lock-plates have also been in use with inclined surfaces formed on the inner flange of the same.

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

In a curtain or shade roller, the combination of the rod *e* and pawl *h*, the pawl pivoted to the rod so as to keep the lower inner end of said pawl in constant engagement with the lugs *k* k^2 when said pawl is not occupying the notches *k'*, the upper inner end of the pawl arranged to impinge against the plate *b*, with the lock-plate *b'*, plug *p*, spring *m*, roller *a*, and pin *d*, substantially as set forth.

GEORGE W. STEELE.

Witnesses:
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KITTIE INGLIS.