(Model.)

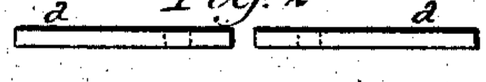
J. MINIÈRE.

UMBRELLA.

No. 257,884. Patented May 16, 1882.

Fig. 1

Fig. 2



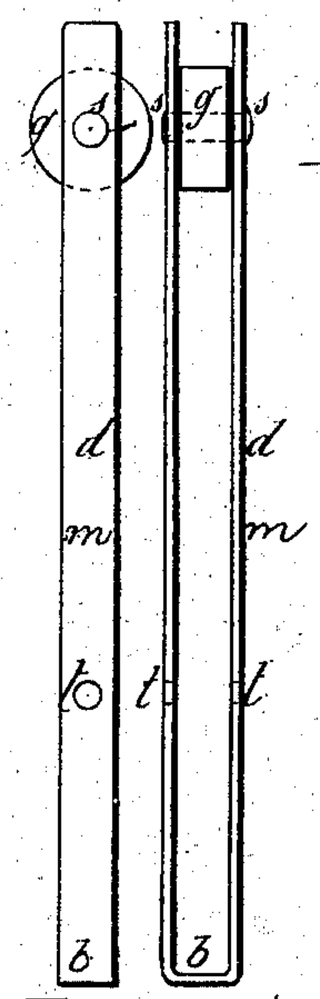


Fig. 3. Fig. 4

Fig. 5

Fig. 6

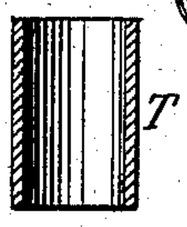


Fig. 9

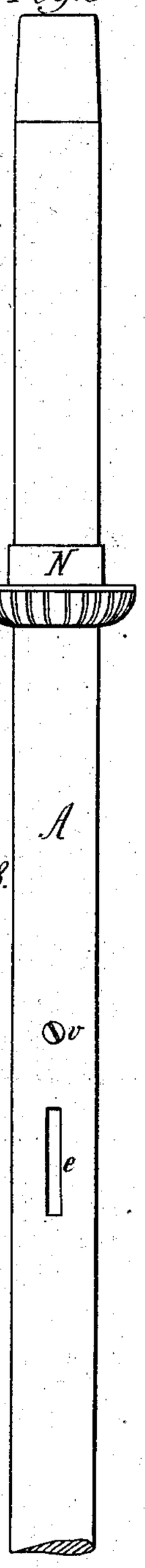


Fig. 7

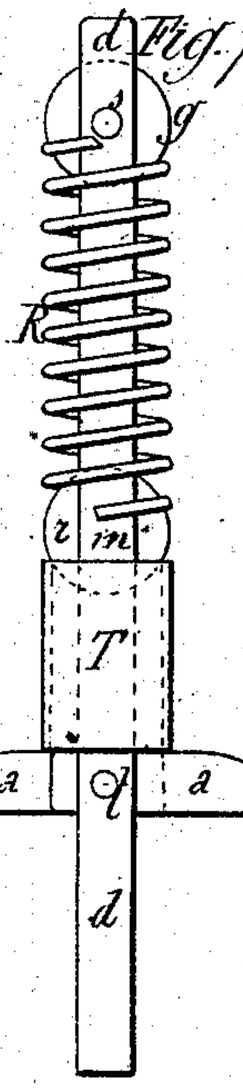


Fig. 8.

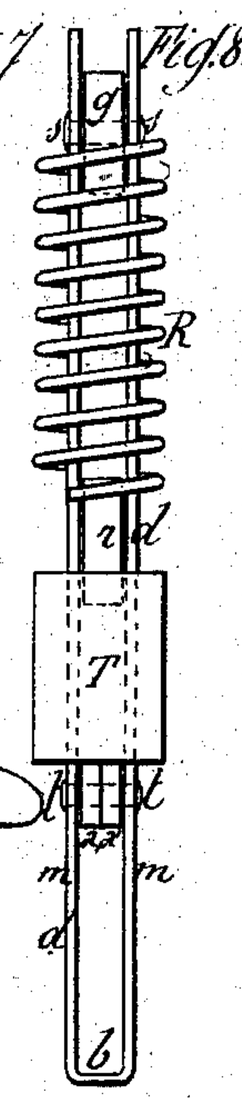


Fig. 10

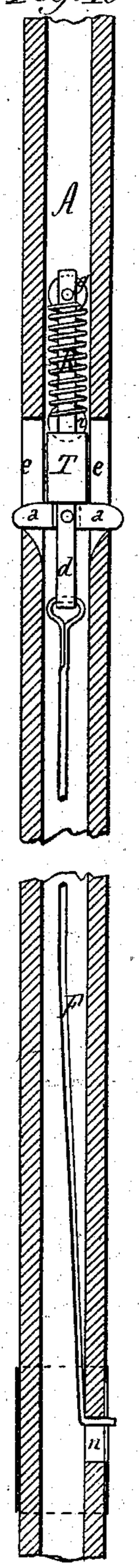


Fig. 11

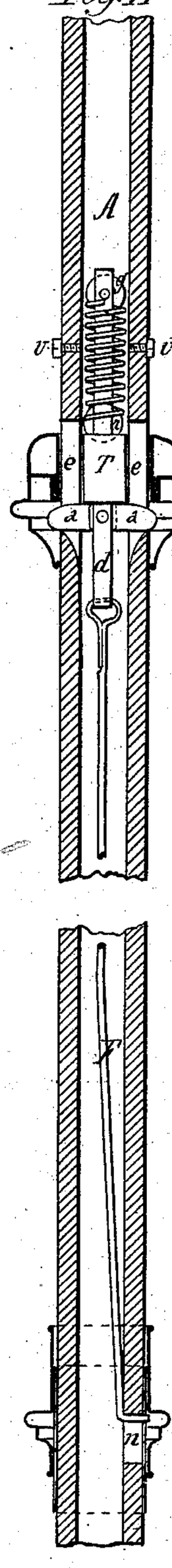
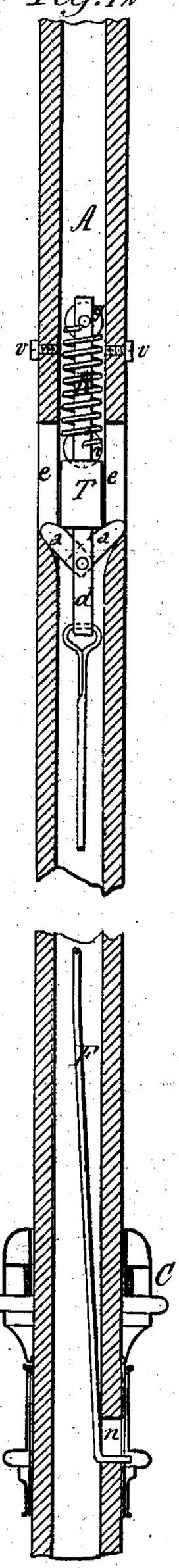


Fig. 12



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UNITED STATES PATENT OFFICE.

JULES MINIÈRE, OF PARIS, FRANCE.

UMBRELLA.

SPECIFICATION forming part of Letters Patent No. 257,884, dated May 16, 1882.

Application filed April 6, 1882. (Model.) Patented in France February 27, 1882.

To all whom it may concern:

Be it known that I, JULES MINIÈRE, a citizen of the French Republic, residing at Paris, France, have invented certain Improvements in Umbrellas, of which the following is a specification.

This invention relates to a device for enabling one to lower or close an umbrella or parasol with the hand that grasps the handle of the same.

In former patents of mine I have shown means for upholding the runner when the umbrella is distended, and a draw-rod of wire extending down therefrom through the hollow stick to a sliding collar at the handle, whereby the runner is released by the hand which holds the umbrella.

In my present invention I employ, but do not wish to claim broadly herein, the hollow stick, the runner, the sliding collar, and the draw-rod. My present invention lies in the device for supporting and releasing the runner.

In the drawings, Figures 1 and 2 are side and edge views of the supporting-latches detached. Figs. 3 and 4 are side and edge views of the spring-rod detached. Figs. 5 and 6 are side and edge views of the intermediate or tubular piece detached. Figs 7 and 8 are side and edge views of the several parts forming the device for supporting and releasing the runner grouped together and properly arranged, but detached from the umbrella-stick. Fig. 9 shows the umbrella-stick in side elevation and denuded of its slides, &c. Fig. 10 is a sectional view of the hollow stick provided with its internal mechanism, and Figs. 11 and 12 show the same provided with its internal and external mechanism.

A represents the hollow stick, provided with the nut or nave N, to which the ribs are hinged, and the slot *e* and stop-screw *v*, which will be referred to hereinafter.

Referring now to Figs. 1 to 8, *a a* are latches, the inner ends of which are perforated, and the outer ends of which are rounded or beveled off, as shown. *d* is the spring-rod, which is formed of a plate bent at its center *b*, so as to form two uprights or cheeks, *m m*. Between the free upper ends of these is mounted a roller, *g*. The axis of this roller passes through two holes, *s s*, and its ends are riveted to prevent its escape. The perforated ends of the latches are placed between the cheeks *m m*, so as to overlap, and a pin is passed through the holes *t t* in the cheeks and through the latches *a a*, and riveted at its ends. Before the roller *g* is mounted, however, a spiral spring, R, is passed over the rod *d*, and arranged between said roller and the latches, as shown. A tubular piece, T, is slipped over the spring-rod *d*, and a disk, *r*, is inserted between the cheeks *m m* of the same, so as to rest on the top of said piece T and under the spring R, when the several parts will assume the positions shown in Figs. 7 and 8. The tube T rests on the loosely-hung latches *a a* and keeps them extended laterally, as shown in Fig. 7. This device, just described and shown complete in Figs. 7 and 8, is mounted in the hollow of the umbrella-stick, as shown on a smaller scale in Figs. 10 and 11. The ends of the latches *a a* project through the slots *e e* in the stick. The draw-rod F is coupled to the lower end of the spring-rod *d*, and the angular projection on its lower end passes out through a slot, *n*, and is engaged in the usual way by an operating slide-ring. (Shown in Figs. 11 and 12.) The rod F is made of such a length that when the latches rest at the bottoms of the slots *e* the projection on the lower end of the draw-rod will rest at the top of slot *n*, as shown in Figs. 10 and 11. The inner angles at the bottoms of slots *e* are cut away, as shown, to permit the latches to operate.

I will now describe the operation of the device.

When the umbrella is raised or distended the runner C rests on the projecting ends of the latches *a a* and cannot descend. This is shown in Fig. 11. When the operating-slide is drawn down the latches are drawn in, the tube T raised, and the spring R compressed. This permits the runner thus freed to slide down the stick. This is shown in Fig. 12. When the umbrella is closed and the runner secured by the usual spring the runner presses down the operating-slide and keeps the latches drawn in; but when the runner is released for raising the cover the spring R is permitted to again throw them out. The runner passes up over the latches in a manner that will be well understood.

The spring R might be placed below the

latches, but in this case its action would not be so powerful, as it would act on the shorter ends of the levers.

To serve as stops to arrest the upward movement of the runner, I prefer to employ large-headed screws *v v* with shanks so short that they will not penetrate into the hollow of the stick and interfere with the internal mechanism.

In putting the parts together, the spring-rod *d*, bearing the roller *g*, spring R, latches *a a*, tube T, and disk *r*, is inserted at the lower end of the stick A and pushed up to the proper point.

The intermediate piece, *p*, might be made in other forms than that shown; but I prefer the simple tubular form shown.

The disk *r* might be omitted and the spring be arranged to rest directly on the cylinder T; or some other shaped piece—as a simple cross-bar—might be substituted for said disk.

Having thus described my invention, I claim—

1. The combination, with the hollow slotted stick and the draw-rod, of the spring-rod, the latches pivoted in the spring-rod and arranged to project through slots in the stick, the spring arranged to press upon the latches, and an intermediate piece between the latches and the spring, all arranged to operate substantially as set forth.

2. The combination, to form a device for holding and releasing the runner of an umbrella, of the spring-rod *d*, the roller *g*, the latches *a a*, the intermediate piece, *p*, and the spiral spring R, all arranged to operate substantially as set forth.

3. The combination, to form a device for holding and releasing the runner of an umbrella, of the spring-rod, the roller *g*, the latches, the tubular piece *p*, the disk *r*, and the spring R, all arranged to operate substantially as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JULES MINIÈRE.

Witnesses:
ROBT. M. HOOPER,
CHARLES MARDELER.