UNITED STATES PATENT OFFICE.

WILLIAM HENRY KEATES, OF STOKE-UPON-TRENT, COUNTY OF STAFFORD, ENGLAND.

BLIND-ROLLER AND FITTINGS.

SPECIFICATION forming part of Letters Patent No. 360,531, dated April 5, 1887.

Application filed October 2, 1886. Serial No. 215,116. (No model.) Patented in England January 26, 1886, No. 1,144.

To all whom it may concern:

Be it known that I, WILLIAM HENRY KEATES, a citizen of Great Britain, residing at Stoke-upon-Trent, in the county of Stafford, England, have invented certain new and useful Improvements in Blind-Rollers and Fittings, (English Patent No. 1,144 of 1886;) and I hereby 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 to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to blind-rollers; and it consists in the novel construction of the same, as hereinafter fully described and claimed.

In carrying out my invention I secure the blind to the roller, and raise or lower it by means of cords wound in opposite directions upon rollers formed on one of the roller-caps, and the blind is held at any raised position by a spring and the friction of the roller-pivots against the supports.

In the drawings, Figure 1 is a front elevation of the blind and its fittings complete. Fig. 2 is a longitudinal section through the fittings at one end of the roller. Fig. 3 is a cross section through the roller. Fig. 4 is an end view of the support for the winding end of the roller, showing the wire guard for the cord.

A is the blind, formed of any flexible material commonly employed. A tuck, *a*, is formed at the top of the blind, through which the rod *a'* is inserted.

B is the blind-roller having a longitudinal recessed groove, *b*, cut throughout its entire length. The rod *a'* and tuck *a* are slid into this groove, and are held securely by the recessed sides of it.

C is the cord for winding the blind up or down. The ends of this cord pass through the holes *d* in the rollers *d' d²*, and the cord is wound in reverse directions upon the said rollers, so that the winding up of one end of the cord is accomplished simultaneously with the unwinding of the opposite end.

D is the roller-cap, to which the cord-rollers are connected. This cap is forced over one end of the roller and is held by the screws *d³*. A slot, *d⁴*, is formed in the cap, which is placed over the blind, so that there is no loss in width, as the edge of the blind can come close up to the flange of the cord-roller *d'*. The bearing *d⁵* of the cap is journaled in the plate E, which may be let into the wood-work at the side of the window.

F is a guard for the cord, which prevents it from coming off the rollers. This guard is formed of wire and passes through the holes *e* in the plate. It lies in the curved groove *e'* at the back of the plate, which prevents it from coming out when the plate is fastened to the wood-work.

G is the cap at the other end of the roller. *g* is the slot in it for the blind, and *g'* are the screws for securing it to the roller, the same as at the winding-cord end. The bearing *g²* of the cap G is made long, and is journaled in the plate H, which may be let into the wood-work at the side of the window, or otherwise secured to it, as found convenient.

I is a socket secured to the plate H and provided with an internal shoulder, *i*. A disk, *i'*, and a spring, *i²*, are placed within the socket, so that the spring presses the disk against the shoulder *i*, which prevents the disk from coming out of the socket. When the blind is put up, the long bearing *g²* bears against the disk *i'* and compresses the spring, which forces the bearing at the other end of the blind-roller against the plate E. This pressure and the friction of the large hollow bearings in their journals is sufficient to support the blind in any raised position.

I am aware of the patent issued to Stewart, No. 332,299, on December 15, 1885, which shows a cord-guide; and I do not claim a cord-guide, broadly.

What I claim is—

The combination of a blind-roller, a blind-roller cap having cord-rollers formed on it, a cord wound in opposite directions upon the said rollers, the fixed plate E, having the curved groove *e'* in the back of it, and holes *e* passing through it, and the guard for the winding-cord passing through the said holes and groove, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM HENRY KEATES.

Witnesses:

GEO. PUGH VEST,

WM. FITZSIMONS.

(No Model.)

W. H. KEATES.

BLIND ROLLER AND FITTINGS.

No. 360,531. Patented Apr. 5, 1887.

Fig. 1.

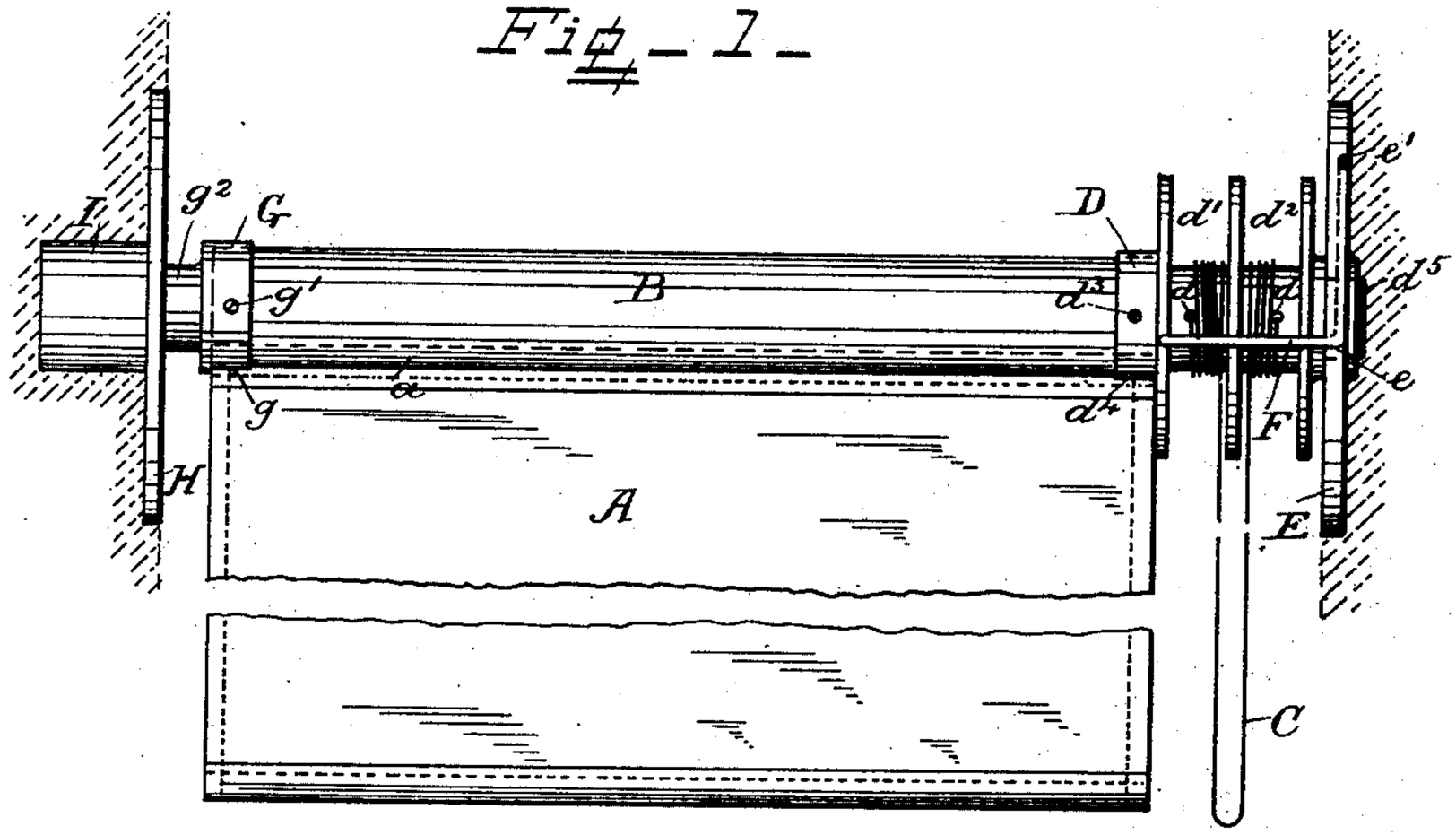


Fig. 2.

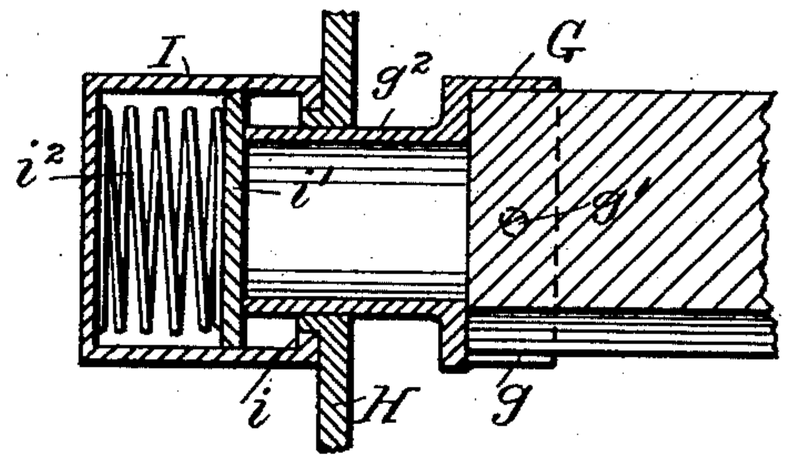


Fig. 3.

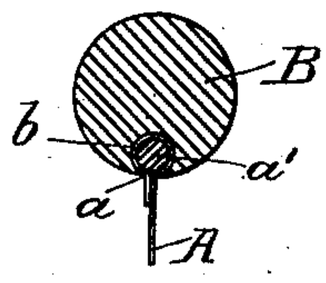
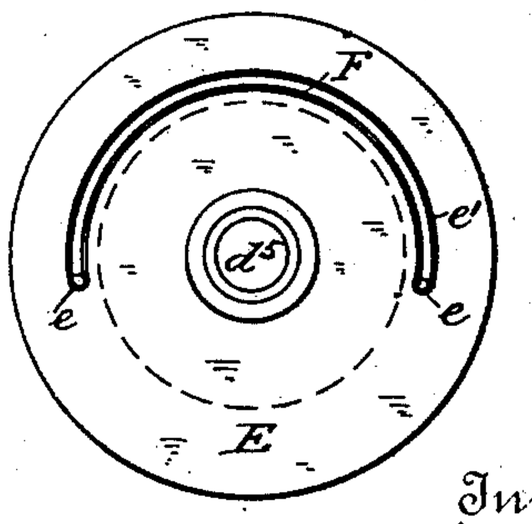


Fig. 4.



Witnesses
C. F. Bell
Walter Allen

Inventor
Wm. H. Keates.
By his Attorney
Herbert W. J. Jenner.