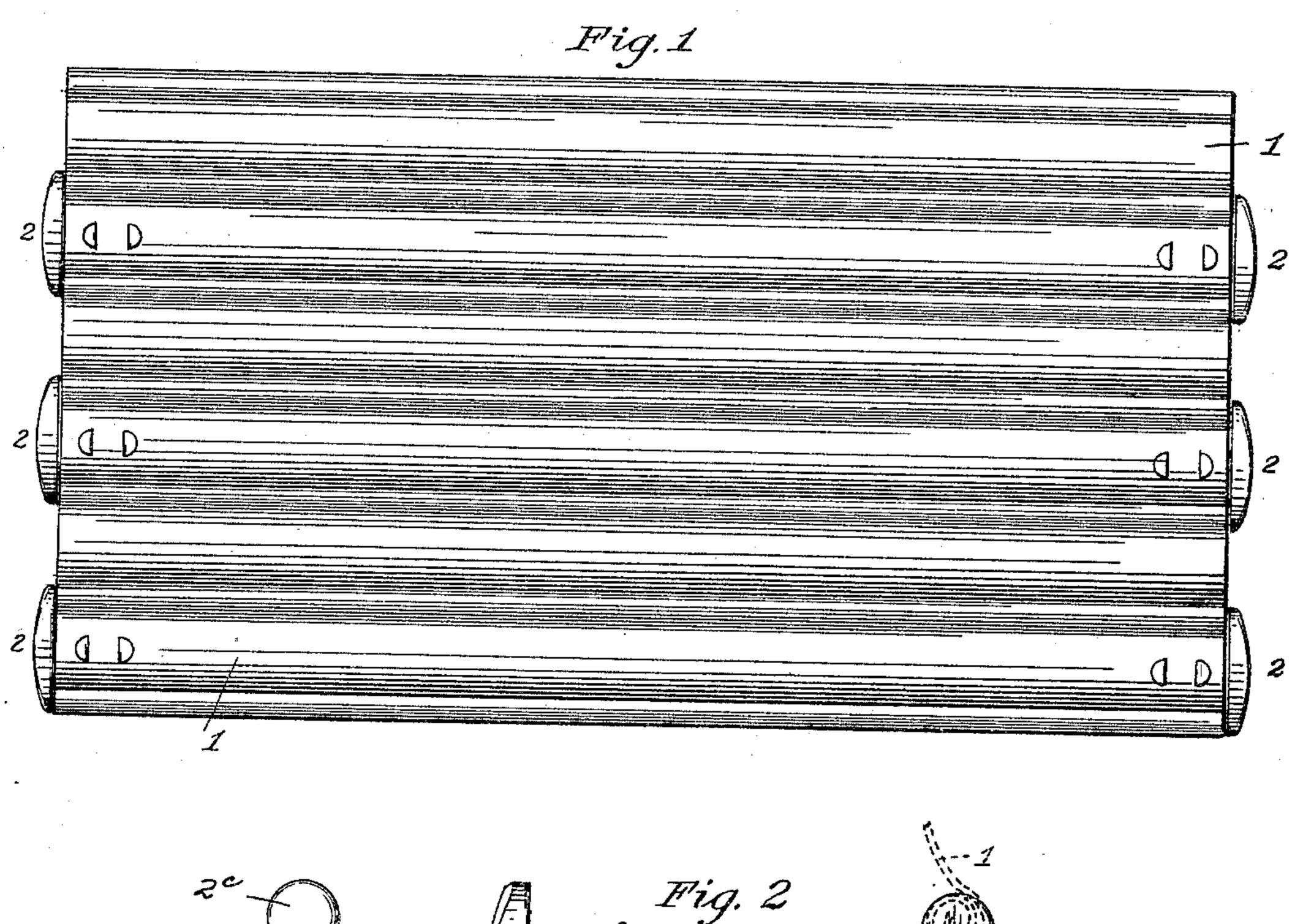
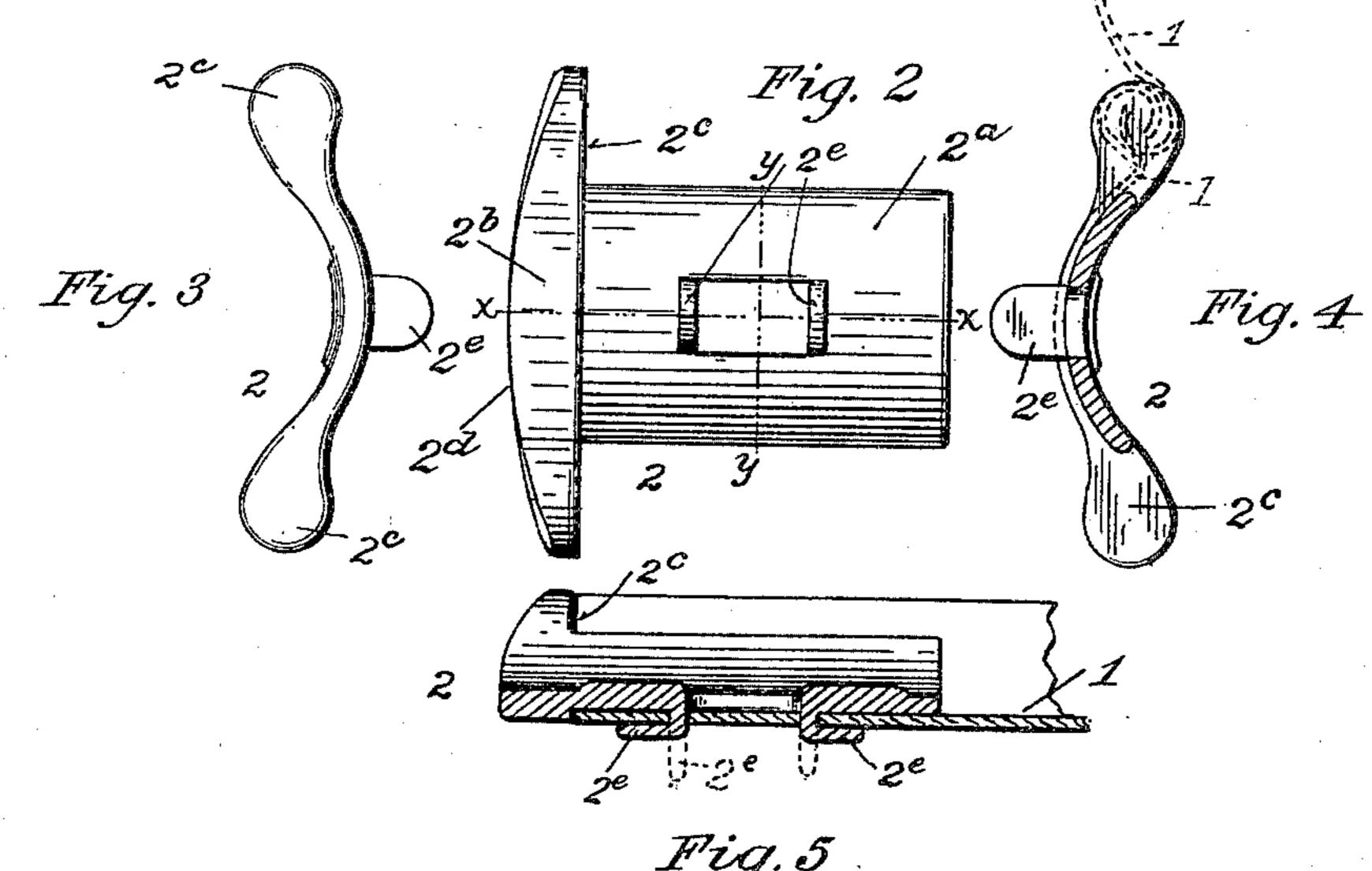
W. R. KINNEAR.

FIRE RESISTING DOOR, BLIND, OR THE LIKE.

(Application filed June 18, 1901.)

(No Model.)





Witnesses Tho E French A. J. Tinckel Urlliam A. Kinnear by Finckel v Finckel Rio attorneys

United States Patent Office.

WILLIAM R. KINNEAR, OF COLUMBUS, OHIO.

FIRE-RESISTING DOOR, BLIND, OR THE LIKE.

SPECIFICATION forming part of Letters Patent No. 682,328, dated September 10, 1901.

Application filed June 18, 1901. Serial No. 65,031. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. KINNEAR, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Fire-Resisting Doors, Blinds, or the Like; and I do 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.

The object of this invention is to provide an improved stop and runner for the ends of slats in fire-resisting doors, blinds, and the like in which the slats are hinged together, so as to be adapted to be rolled up, the particular purpose of such stops being to prevent the longitudinal movement of the slats with respect to each other.

It is also my object to provide an improved runner for the edges of such doors, blinds, &c., whereby they shall run with greater smoothness and certainty in the channels in which they are secured.

The invention resides in the construction hereinafter described and claimed.

In the accompanying drawings, illustrating one embodiment of my invention, Figure 1 is a view in elevation of a portion of a cur30 tain, door, or blind with my present stops and runners applied. Fig. 2 is an enlarged view of one side of the stop alone. Fig. 3 is an end view of the head of the device. Fig. 4 is a sectional view of the stop, taken on the line 35 yy, Fig. 2, and looking toward the flanged or head end thereof. Fig. 5 is a sectional view of the device on the line xx, Fig. 2, a piece of the slat to which the device is attached being in section.

In the several views, 1 designates the slats. These can be like those shown in my Patent No. 572,014, dated November 24, 1896, or of any other approved construction in which the slats are hinged together and it is desired to provide means to prevent them from moving upon each other or in which a runner for the edge of the curtain or door is desirable.

2 designates the stop or runner or the combined stop and runner. These are shown to consist of a shank portion 2°, curved to fit the concave or hollow side of the slat, and a head

2^b, that projects laterally like a flange beyond the shank portion. This head is shown to project, particularly at its ends, as indicated at 2°, so as to reach over the edges of slats 55 hinged to that in which the stop or combined stop and runner is secured, thereby affording an abutment to prevent the longitudinal movement of such adjoined slats. It frequently happens that obstructions or rough- 60 ness exists in the channels or runways in which such blinds or doors are secured, and it is therefore important that such blinds or doors shall run freely in such channels or runways. Hence I make the outer end of the 65 head 2b tapering, angular, or rounded, as indicated at 2^d, thereby insuring its easy movement over such obstructions or roughness. These stops and runners can be secured by any suitable means; but those shown consist 70 of two lugs 2°, bent up out of the shank or cast therewith, which lugs after being passed through holes in the slat can be bent down in opposite directions, thus securely fastening the stop or runner to the slat.

It will be observed that a stop in each of the opposite ends of one slat suffices to prevent the longitudinal movement of three slats with respect to each other; but where the curtain or door is composed of a large number 80 of slats I prefer at present to locate them in the curtain or door, as indicated in Fig. 1—that is, a stop at each end of alternate slats.

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

1. In combination with a fire-resisting curtain, door or the like composed of metallic slats hinged together, of stops and runners attached to the ends of alternate slats, said stops and runners each comprising a shank 90 portion secured to the slat and a head portion tapering for the purpose explained and laterally-projecting portions preventing outward longitudinal movement of the slats with respect to each other, substantially as described. 95

2. A runner for fire-resisting curtains or doors of the kind described, comprising a shank portion adapted to be secured to a slat, and a tapering head portion projecting beyond the end of the slat, substantially as described.

3. A combined stop and runner for slats of

a fire-resisting curtain or door of the kind described, comprising a shank portion adapted to be secured to the end of the slat and a tapering head portion having a laterally-projecting portion to prevent outward longitudinal movement of an adjoined slat, substantially as described.

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

WILLIAM R. KINNEAR.

Witnesses:
Theo. Weyant,
George M. Finckel.