J. N. STONE.

BOOK SUPPORT.

APPLICATION FILED APE. 22, 1909.

935,560.

Patented Sept. 28, 1909.

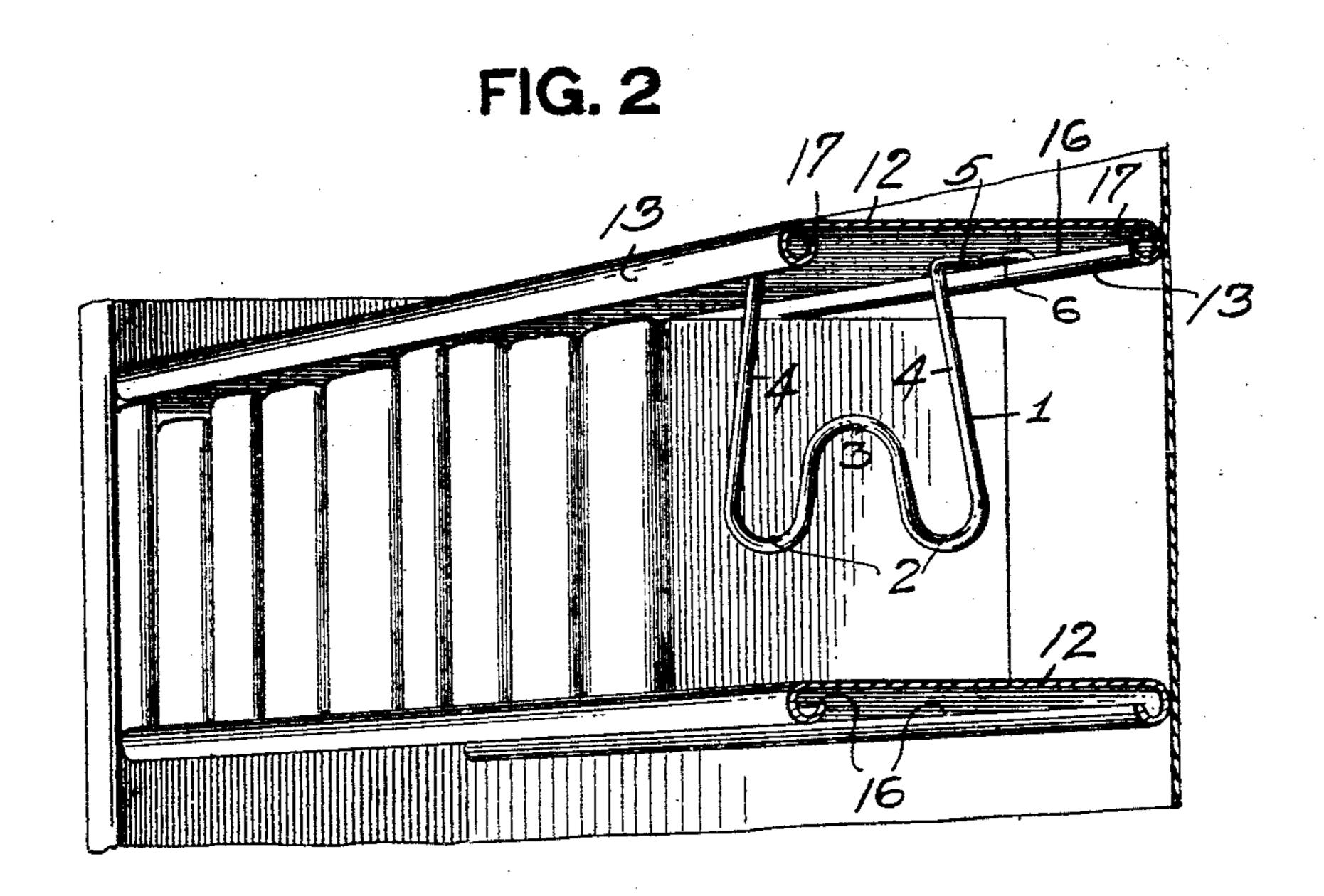


FIG. 4

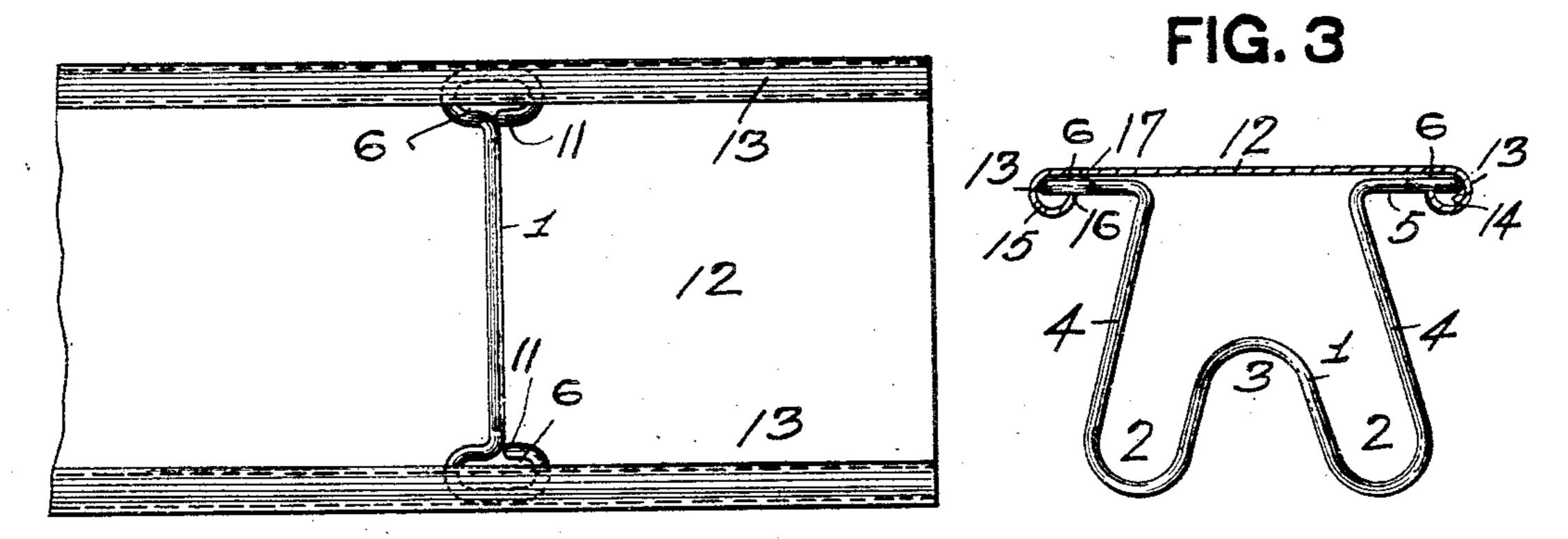
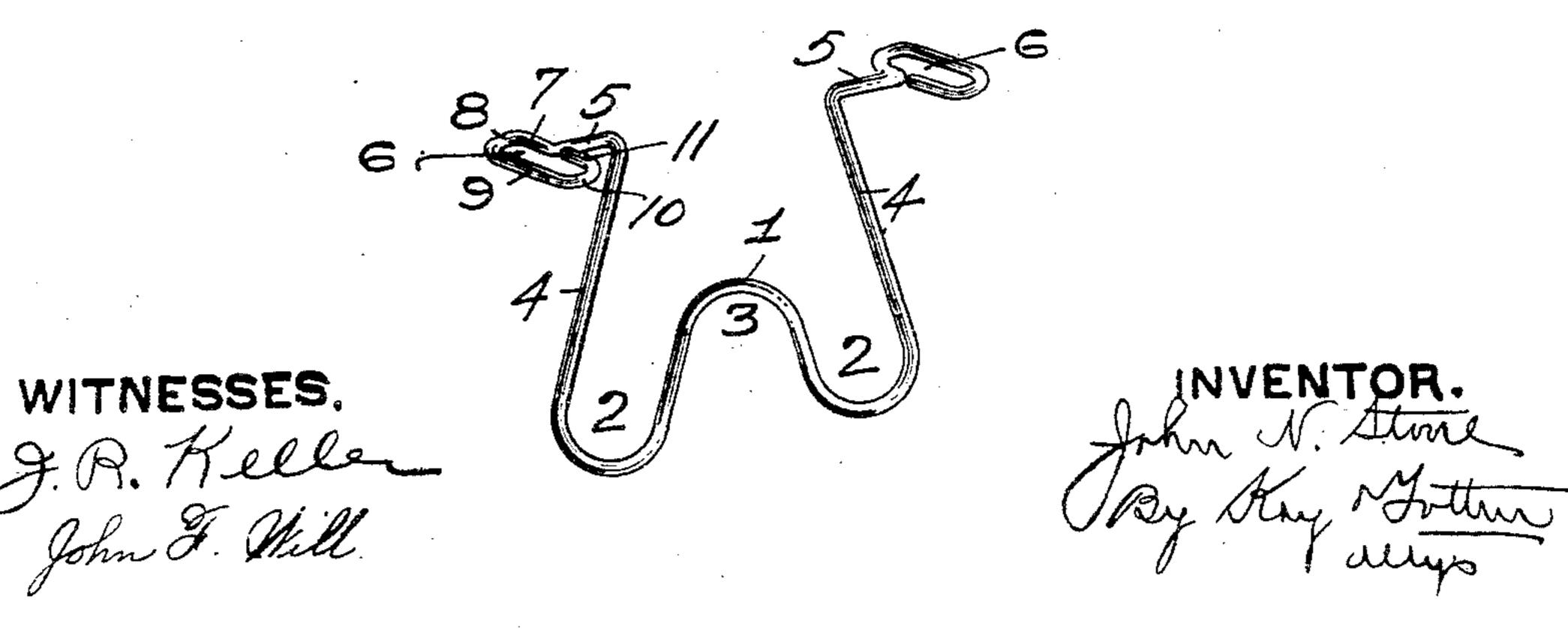


FIG. 1



UNITED STATES PATENT OFFICE.

JOHN N. STONE, OF JAMESTOWN, NEW YORK, ASSIGNOR TO ART METAL CONSTRUCTION COMPANY, OF JAMESTOWN, NEW YORK, A CORPORATION OF NEW YORK.

BOOK-SUPPORT.

935,560.

Specification of Letters Patent. Patented Sept. 28, 1909.

Application filed April 22, 1909. Serial No. 491,619.

To all whom it may concern:

5 ed a new and useful Improvement in Book-Supports; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to book holders, its 10 object being to provide a simple, cheap and efficient form of book holder to engage with the shelf and press against the book where the shelf is not full and hold the column of books in upright position.

It comprises, generally stated, the combination with the shelf having guide rails, of a resilient wire book support having flat looped end portions adapted to engage with the guide rails of the shelf and hold thereto 20 and so maintain the books on the shelf in upright position, as hereinafter described.

In the accompanying drawings Figure 1 is a perspective view of the book support; Fig. 2 is a view of a portion of shelving 25 showing the same in use; Fig. 3 is a cross section of the shelf showing the book support in position; and Fig. 4 is a bottom view of the shelf illustrating the manner in which the book support engages with the guide 30 rails.

The book support 1 is formed of suitable resilient wire which can be bent to shape and when set has sufficient spring action to hold to the shelf as hereafter described. 35 The general form of the body portion is the same as illustrated in Letters Patent to Hine, 560,851, of May 26, 1896, the wire body of the book support having the depending loops 2, and being bent upwardly in the 40 mid-portion as illustrated at 3, so providing an extended depending bearing portion 2, 3 against which the books will rest. The wire body is then carried upwardly to form the spring arms 4, and then provided with the 45 horizontaloutwardextensions or arms 5 which terminate in the flat or horizontal loops 6. The preferred form of these loops is illustrated in the drawing, the loops being what might be termed elongated closed loops, the 50 metal of each loop being carried from the arm 5 longitudinally as at 7 to the curved end portion 8 and thence backwardly to form the practically straight longitudinal outer bearing edge 9 practically at right an-55 gles to the body of the loop, and then curved |

back again as at 10, the ends 11 being Be it known that I, John N. Stone, a resibrought back to the arms 5 and so forming dent of Jamestown, in the county of Chau- | the closed horizontal elongated loop. The tauqua and State of New York, have invent- | loops are given this construction to perform the functions required in connection with 60 the shelf. The shelves 12 are illustrated as formed of plate or sheet metal and they have the continuous guide rails 13 at the edges thereof, the guide rails illustrated being formed from the body of the plate by down- 65 ward and inward turning of the metal under the shelf, as at 15, the edges 16 being brought upward beneath the shelf, leaving the spaces 17 to receive the loops of the book support. The spaces 17 are of sufficient width to allow 70 the easy access of the loops 6 into such

spaces.

When in use the book support is sufficiently contracted by the hand of the operator to let its loops pass in between the guide 75 rails 13 and into line with the receiving spaces 17 above the up-turned edges 16 of the guide rails when the book support is allowed to expand and it will be seen that its horizontal loops 6 travel on the edges of 80 the guide rails and are supported thereby, the elongated loops giving a broad bearing surface on the up-turned edges 16 of the supporting rails while the outer edge portions 9 of the loops are forced by the resili- 85 ency of the body of the book support outwardly against the inner faces 14 of the downwardly extending portions 15 of the guide rails. The book support is thus supported by the guide rails, and is held by 90 its own resiliency in sufficient contact therewith to give the necessary resistance to hold the book resting against its lower bearing portion in upright position. The longitudinal edge faces of the loops are also held 95 substantially parallel with the down-turned edge portions of the guide rails 15 and so tend to hold the book support in proper position transverse of the length of the shelf. It will be noticed that the down-turned por- 100 tion 15 of the shelf is formed on a curve. When the book support is inserted in place the outer edge portions 9 of the loops naturally travel down onto the up-turned edge portions 16 of the guide rail, holding them 105 in contact therewith. It will also be noticed that the loops 6 are of greater width than the width of the guide rails, so that the elongated loop portions 6 naturally contact with the raised edges 16 of the guide rails 110

for a considerable distance. This tends to hold the book support steady in position and gives an ample contact between the loops of the book support and the guide rails to pre-

5 vent wabbling of the book support.

The book support can be easily inserted in place and withdrawn when not needed for use, as all that is necessary is to grasp it by the hand, compress it slightly and enter it 10 between the two guide rails of the shelf and permit it to expand, when, as above described, the resiliency of the support forces the outer edge portions of the loops against the downwardly curved inner faces of the 15 guide rails, and causes the loops to travel down so as to be brought into contact with the upwardly turned edge portions 16 of the guide rails, so bringing the book support to proper position. While having sufficient 20 friction to hold the column of books in position wherever it may be placed it can be quickly adjusted longitudinally within the shelf by slightly contracting it while the loops remain within the guide rails and 25 again permitting it to expand; and it can be entirely removed by still further contracting it. The book support is also reversible, either loop operating in connection with either guide rail so that it can be quickly 30 placed in position by unskilled hands. It is also exceedingly cheap in construction.

What I claim is:

1. An integral wire book support having a resilient body and having horizontal loops

35 formed at the ends thereof.

2. The combination of a book shelf having guide rails thereon, and an integral resilient wire book support having elongated loops at its ends engaging with said guide rails.

3. The combination of a book shelf having downwardly and inwardly turned guide

rails, and a resilient wire book support having horizontal loops at the ends adapted to enter within and engage with the in-turned guide rails.

4. The combination of a book shelf having downwardly and inwardly turned guide rails with upwardly turned edge portions and a resilient wire book support having end loops adapted to enter within the guide rails 50

and rest on its up-turned edge.

5. The combination of a book shelf having downwardly and inwardly turned guide rails with upwardly turned edge portions and a resilient wire book support having 55 elongated end loops adapted to enter within the guide rails and rest on the upturned edges thereof, the loops being of a greater width than that of the guide rails.

6. The combination of a book shelf having 60 inwardly turned guide rails, and a resilient wire book support having end loops formed thereon, said end loops having practically straight outer faces adapted to enter within the guide rails and bear on the inner faces 65

thereof.

7. The combination of a book shelf having guide rails provided with outwardly and downwardly curved inner faces and upwardly turned edge portions within said 70 faces, and a resilient wire book support having horizontal end bearing portions adapted to rest upon the up-turned edge portions and bear against the outwardly curved inner faces of the guide rails.

In testimony whereof, I the said John N.

Stone have hereunto set my hand.

JOHN N. STONE.

Witnesses:

Louis W. M. Stevens, B. G. Partridge.