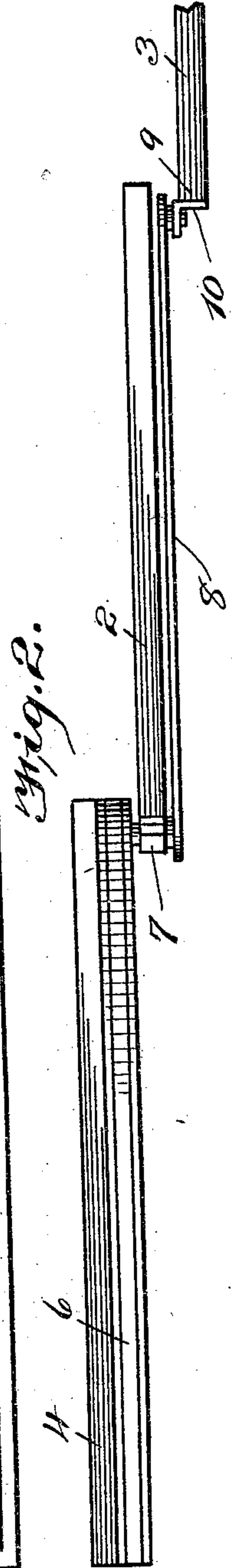
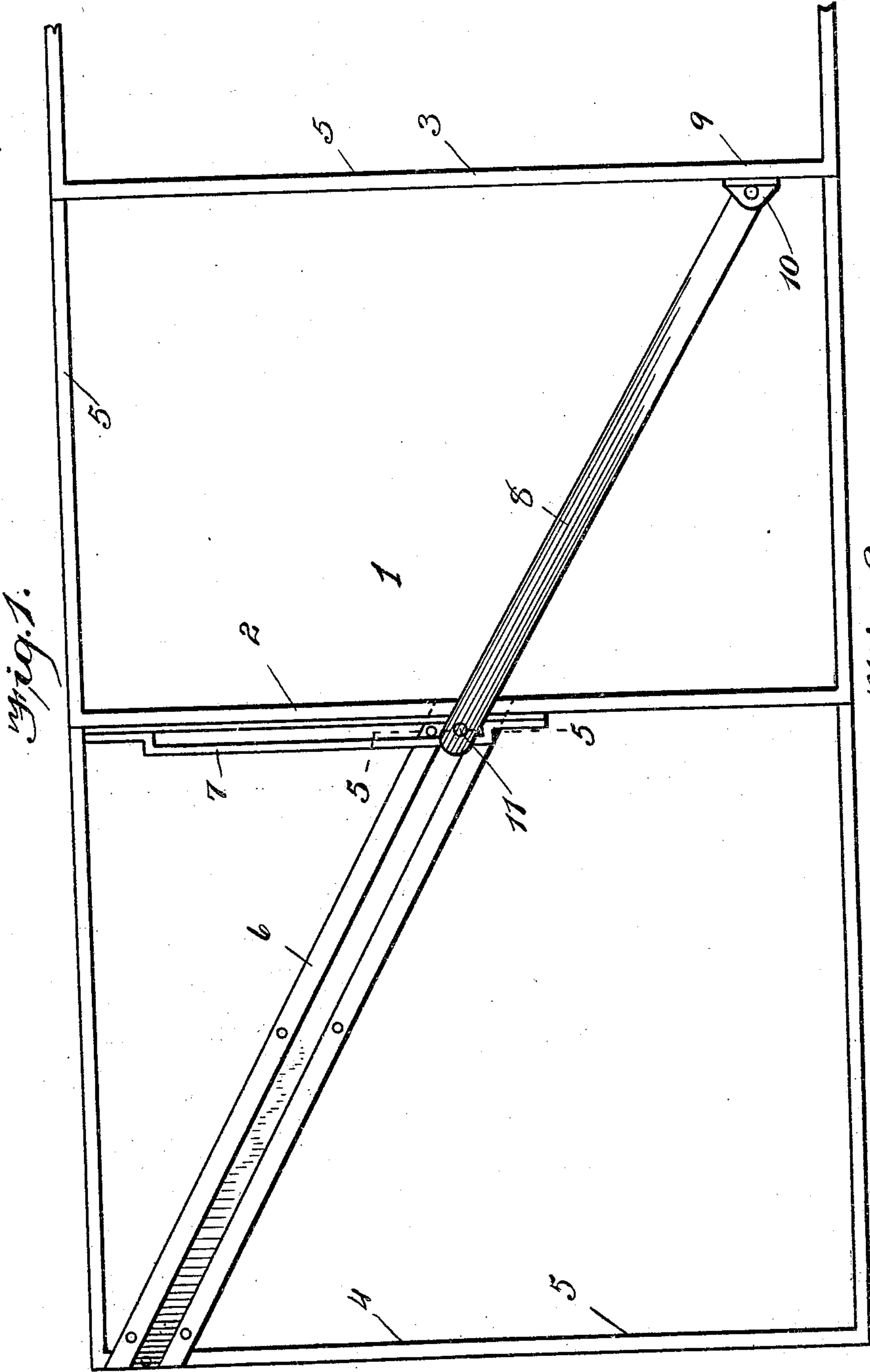


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R. W. SCHWEIMLER.
SLIDING DOOR.
APPLICATION FILED JUNE 28, 1909.

Patented Apr. 5, 1910.

2 SHEETS—SHEET 1.



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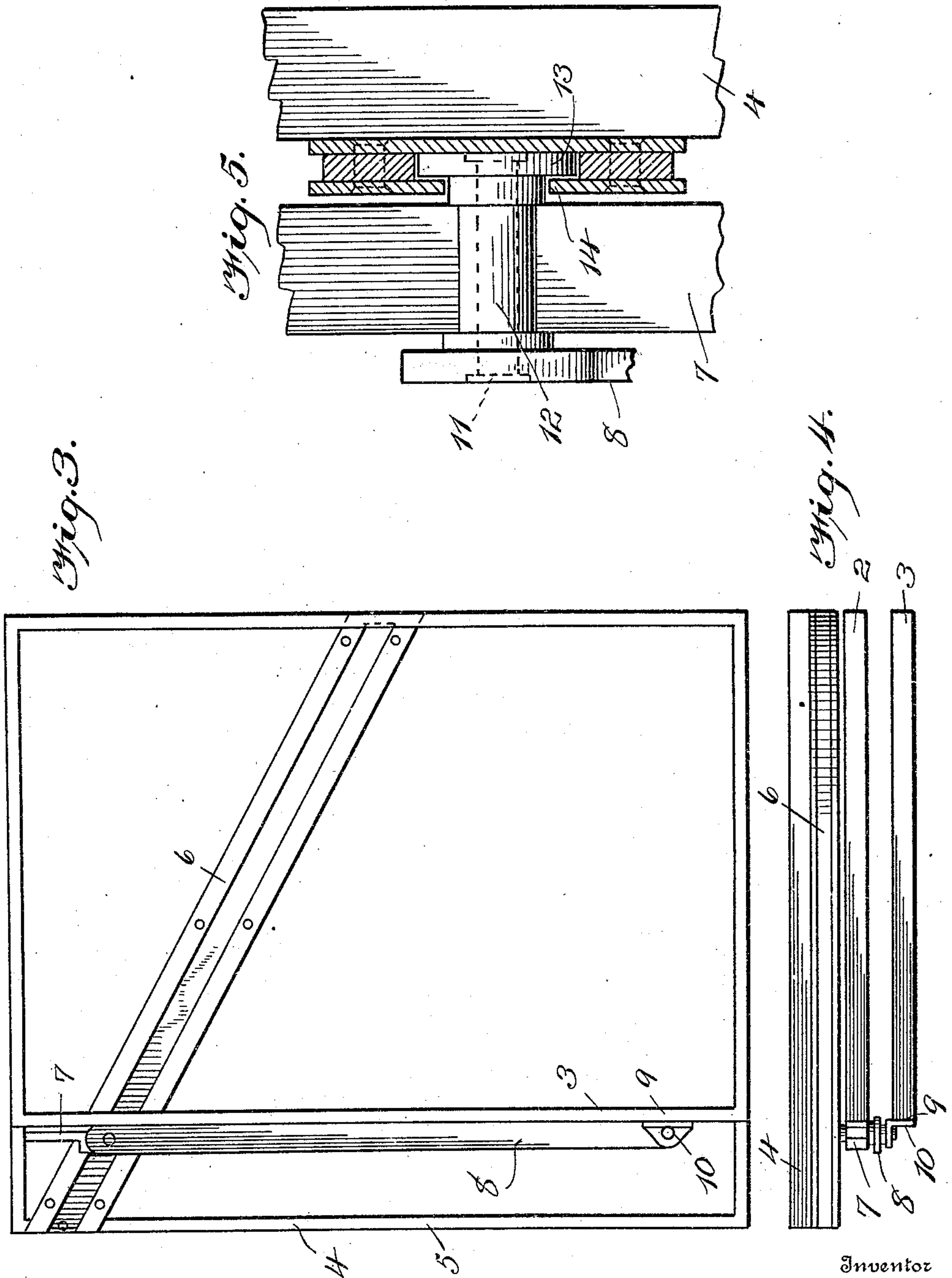
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UNITED STATES PATENT OFFICE.

ROBERT W. SCHWEIMLER, OF LOUISVILLE, KENTUCKY, ASSIGNOR TO THE DOW WIRE & IRON WORKS, OF LOUISVILLE, KENTUCKY, A CORPORATION OF KENTUCKY.

SLIDING DOOR.

953,924.

Specification of Letters Patent.

Patented Apr. 5, 1910.

Application filed June 28, 1909. Serial No. 504,897.

To all whom it may concern:

Be it known that I, ROBERT W. SCHWEIMLER, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Sliding Doors; and I do 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 figures of reference marked thereon, which form a part of this specification.

This invention relates to the class of doors and has for its object to provide a system of sliding doors simultaneously operating in such manner that a plurality of doors slide behind each other to close an opening.

A further object of this invention is to provide a device in which the doors operate simultaneously, and in which one door moves faster than the other in such manner that all the doors reach the end of their travel at the same time.

With these objects in view this invention consists in the construction which provides for the simultaneously operating of a plurality of sliding doors in such manner that all the doors reach the end of their travel at the same time.

Referring to the accompanying drawings: Figure 1 is an elevation of the device. Fig. 2 is a top plan thereof. Fig. 3 is an elevation showing doors open. Fig. 4 is a top plan of the doors open, and Fig. 5 is a vertical section taken on line 5—5 of Fig. 1.

Like numerals of reference indicate the same parts throughout the several figures in which:

1 indicates the device which as shown in the drawing comprises two doors 2 and 3; and 4 indicates a fixed panel or wall. In order to better illustrate the device, the frames 5 of the doors and panel are only shown. The panel 4 is as shown in Fig. 1 provided with a diagonal guide 6, while one edge of the door 2 is provided with a vertical guide 7.

8 indicates an arm or lever pivoted to the edge 9 of the door 3 by means of a bracket 10, and the other end of said arm or bracket 8 is connected to the two guides 6 and 7 by

means of a bolt or pin 11, said bolt or pin passing entirely through the guide 7 and into the guide 6.

Referring now to Fig. 5 it will be seen that a sleeve or bushing 12 is provided on the pin 11 to roll in the guide 7, while a second roller or disk 13 is journaled on the end of said pin to roll loosely in the guide 6. By means of this construction the wear and friction is reduced to a minimum. As will appear from Fig. 5, the guide 6 is provided with the flanges 14 in order to securely retain the roller or disk 13 therein.

Having thus fully described my invention its operation is as follows: The doors being closed as shown in Figs. 1 and 2, the operation of opening causes the pin 11 to travel in the guide 6 and vertically in the guide 7. This vertical movement of the pin 11 in the guide 7 draws the door 3 over the door 2 faster than the door 2 travels over the panel 4. The length of the arm or lever 8 is such that as soon as the pin 11 therein reaches the top of the guide 7 the door 3 has been drawn directly over or in front of the door 2 as shown in Figs. 3 and 4, so that both doors reach the end of their travel simultaneously. In closing the doors the operation is reversed and both doors reach the end of their travel in the opposite direction simultaneously.

While I have illustrated only two doors it is perfectly apparent that a system of any number of doors can be operated in like manner, and this invention is particularly designed to be used where the maximum opening is required such as in elevators and the like.

Having thus fully described my invention what I claim as new and desire to secure by Letters Patent of the United States is:—

1. A device of the character described comprising a plurality of sliding doors, a guide associated with said doors, a guide arranged on one of said doors, an arm pivoted to one of said doors, and means carried on said arm to operate simultaneously in said two guides.

2. A device of the character described comprising a plurality of sliding doors, a diagonal guide associated with said doors, a vertical guide arranged on one of said doors, an arm pivoted on one of said doors and means carried on said arm to operate simul-

taneously in said diagonal guide and said vertical guide.

3. A device of the character described comprising a plurality of sliding doors, a fixed
5 guide associated with said doors, a guide arranged on one of said doors, an arm pivoted on one of said doors and means on one end of said arm to operate simultaneously in

said fixed guide and in said guide on one of the doors. 10

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

ROBERT W. SCHWEIMLER.

Witnesses:

H. D. POTTER,

EDWARD GROTH.