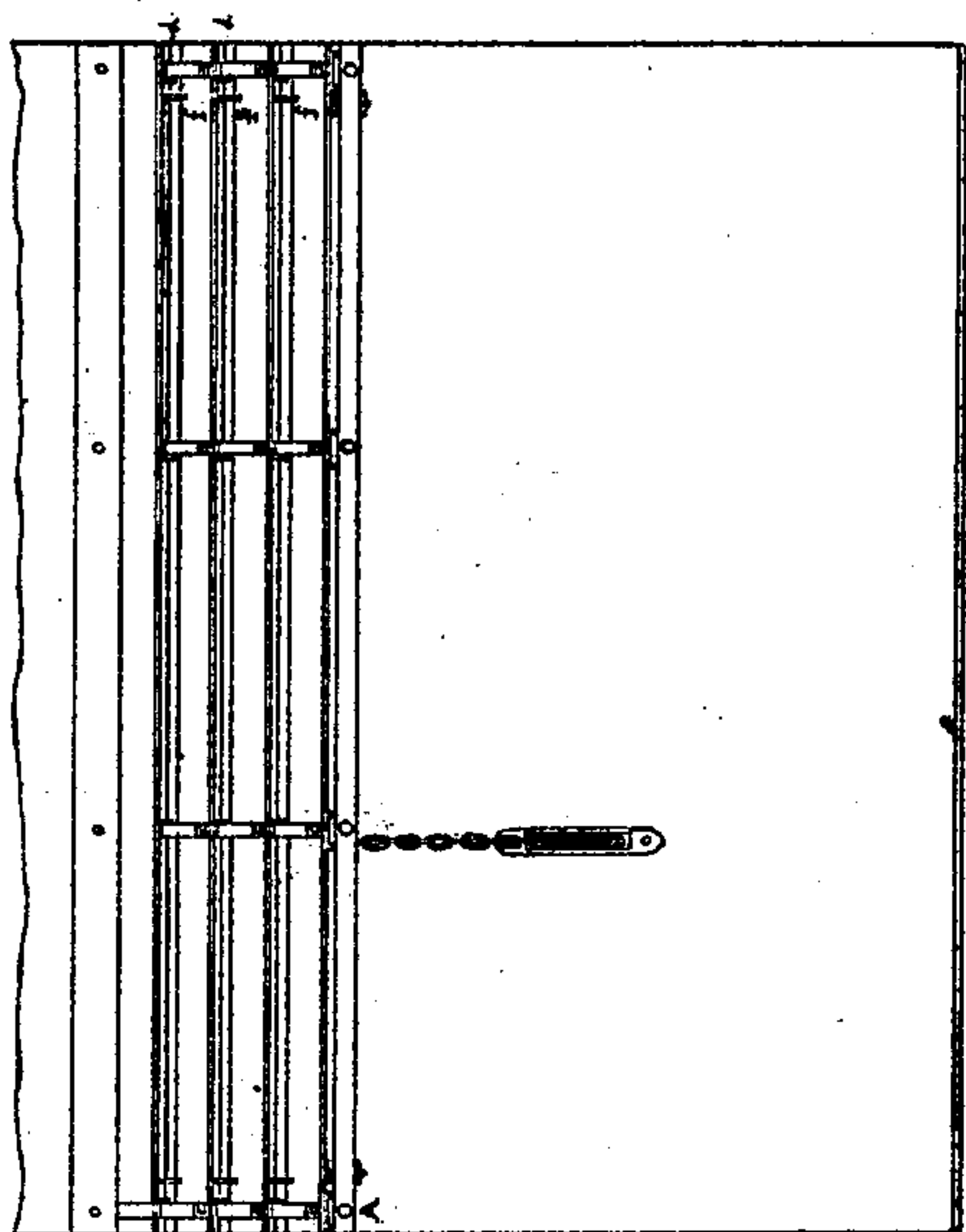
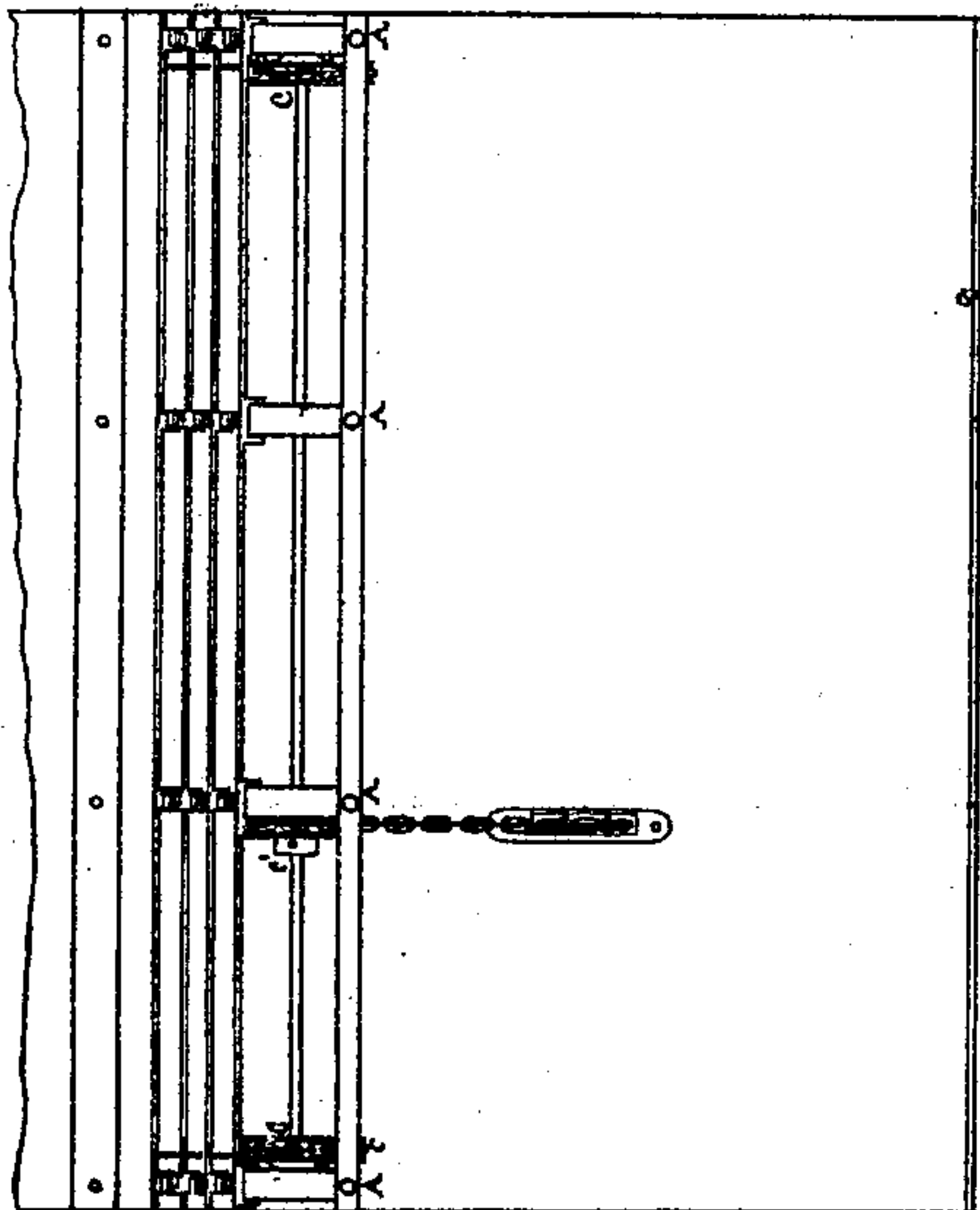


W. Hildebrand,

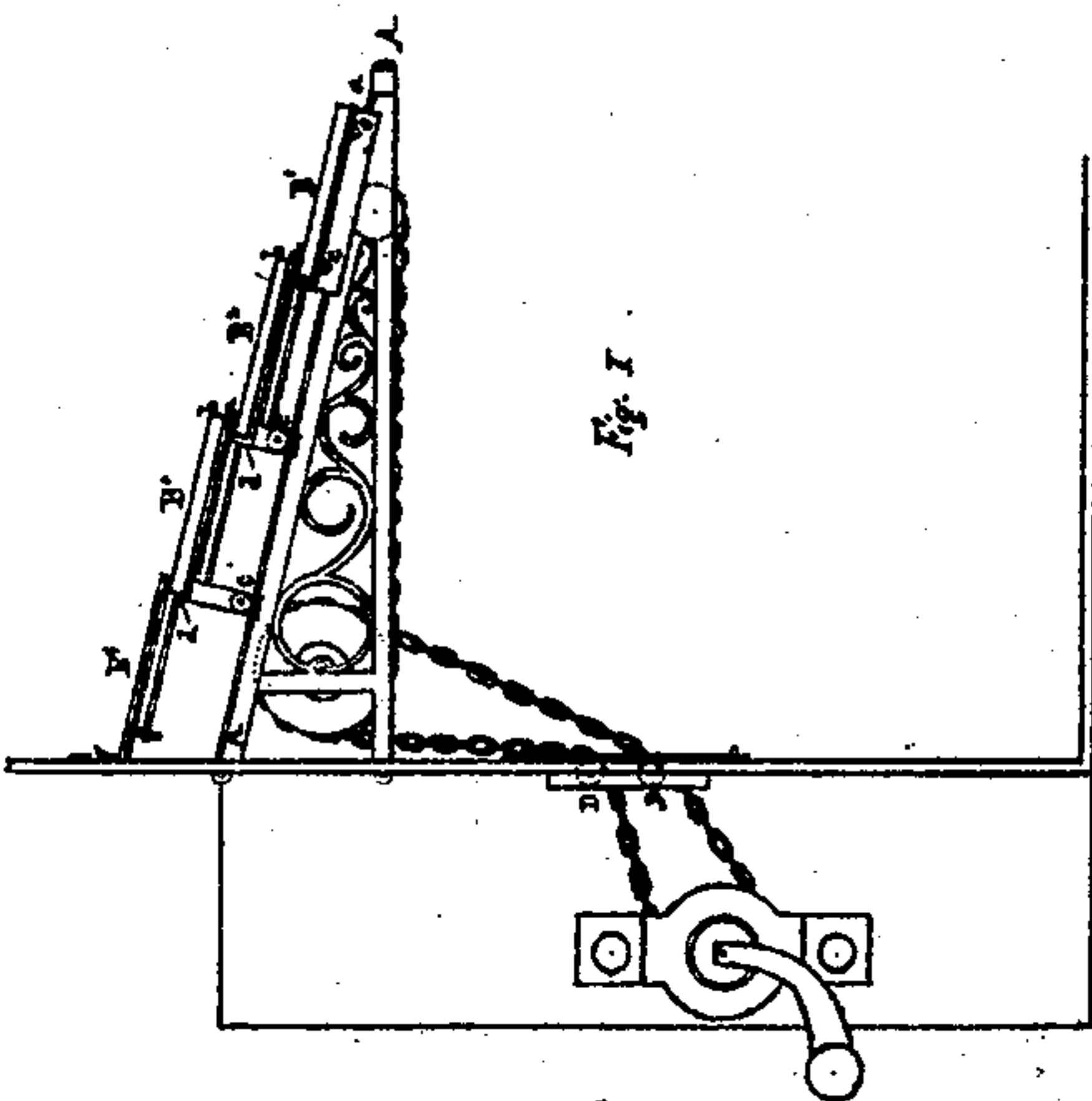
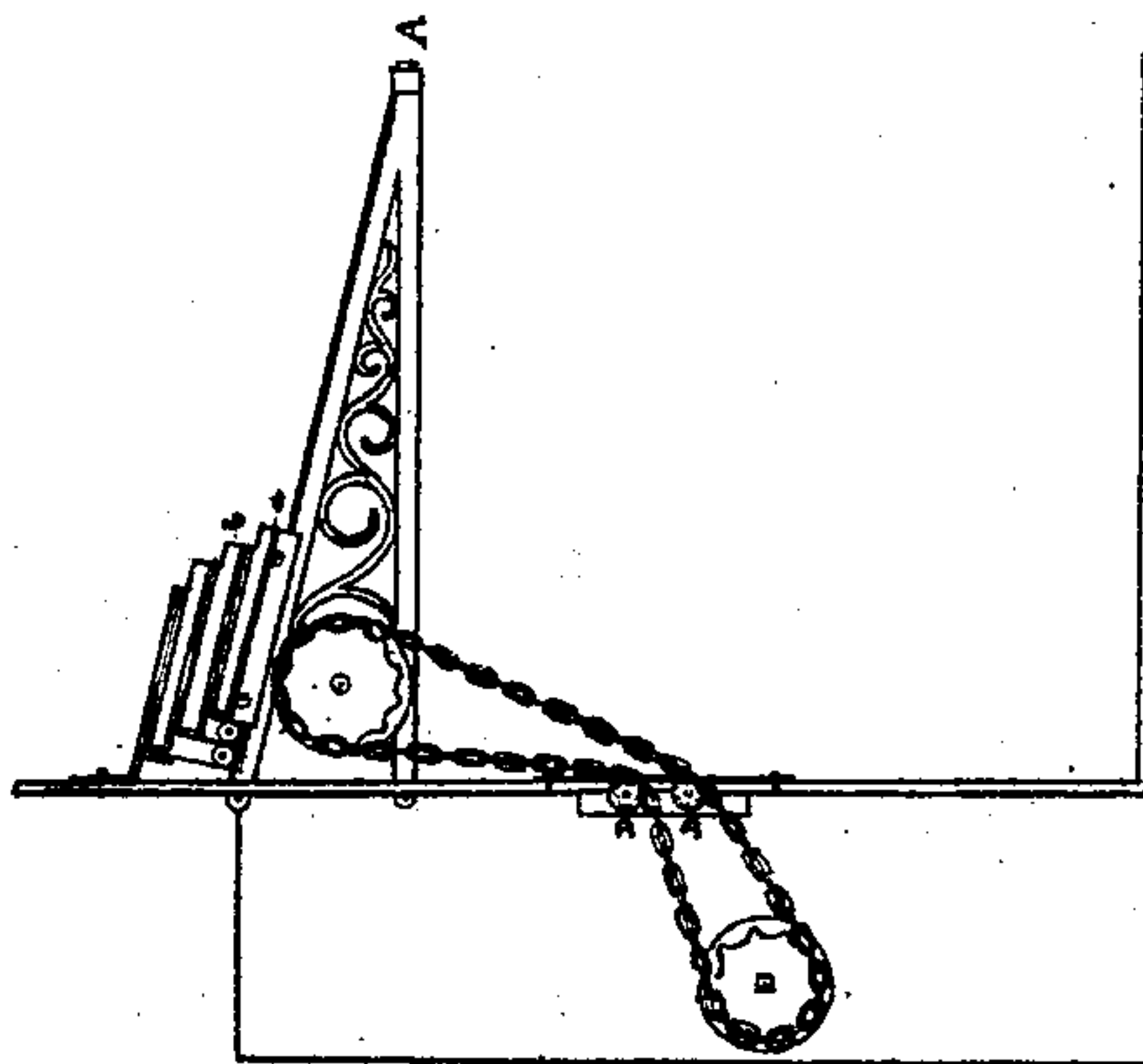
Attorney.

No. 109007.

Patented Nov. 8. 1870.



attests,
Wm. J. Keen
H. F. Wilson



Inventor
Wm. Hildebrand

United States Patent Office.

WILLIAM HILDEBRAND, OF FORT WAYNE, INDIANA.

Letters Patent No. 109,007, dated November 8, 1870.

IMPROVEMENT IN AWNINGS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WILLIAM HILDEBRAND, of Fort Wayne, in the county of Allen and State of Indiana, have invented certain new and useful Improvements in Awnings; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, in which like letters refer to like parts in the different figures.

The nature of my invention consists in constructing awnings in sections, which may be extended or contracted by any suitable means, as will be hereafter fully described.

To enable others skilled in the arts to make and use my invention, I will proceed to describe its construction and operation.

A A represent brackets, constructed as Figure 1, which project from the side of a building, at any point where an awning is desirable. These brackets may be constructed of wood or metal, as most desirable, their upper surface forming an inclined plane, upon which rests the sheeting of the awning.

B¹ B² B³ B⁴ represent the sheeting of the awning, and are constructed as follows, to wit:

a B¹ represents a thin board or a thin sheet of metal or other substance, of a suitable length and width, upon the upper surface of which are secured metallic cleats, b b b b. These cleats are so grooved as to admit the interlocking of similar grooved cleats on the lower surface of the next succeeding section of sheeting, as will be readily understood by referring to the drawing.

Upon the lower surface of section B¹ of the sheeting are secured metallic grooved plates, which rest upon the inclined surface of the bracket, and serve as guides to the movement in operating the sheeting.

These guides are also provided with friction-rollers, c c, which greatly facilitate the operation of the sheeting by relieving friction.

The upper edge of each section is provided with a flange, d, which prevents rain or the rays of sun from passing through the awning, as will be readily understood.

Upon the lower surface, and near the upper edge of section B² and B³, there are secured studs, which project downward to near the upper surface of the bracket

A. These studs are provided with small friction-rollers, which rest on said bracket, and serve to steady the sections in place and facilitate their movements.

Section B⁴ is secured to the front of the building, as seen in the drawing, and remains stationary. Said section is so elevated above the plane of the bracket that the sliding sections may easily pass under it, as seen in fig. 1.

Small pins or studs, f f, are secured to the under surface of the sections, near the lower edge thereof, which serve to stop the sections, and hold them in position when extended, as will be readily understood.

C C C represent pulleys, secured on an axle which extends the entire length of the awning, and which is secured in suitable bearings.

Over pulleys C C chains or cords pass, which extend to and pass over other pulleys, D D. To this chain section B¹ is secured.

When a rotary motion is imparted to the pulleys the sections are forced either up or down, as desired, thus extending the awning or contracting it at the pleasure of the operator.

An additional chain or cord passes over pulley C', and extends downward into the interior of the building, where it passes over another pulley, which may be placed in any convenient position, and which may be operated by means of a crank or other device for the purpose of imparting a rotary motion to the pulleys, thus contracting and extending the awning as may be desired.

Said awning may be operated by means of a lateral screw secured to the building, and passing through suitable nuts secured to the lower section.

The pulleys are so recessed and serrated as to mesh into and take hold of a chain or cord, and thus prevent their slipping.

What I claim as my improvement in awnings is—

The arrangement and combination of the brackets A, sheathing or shades B, with thin flanges or guides f and d, friction-rollers c, chains and pulleys D D, as shown and described, for the purposes set forth.

WM. HILDEBRAND.

Witnesses:

H. F. WILLSON,

E. O'ROURKE.