

No. 626,618.

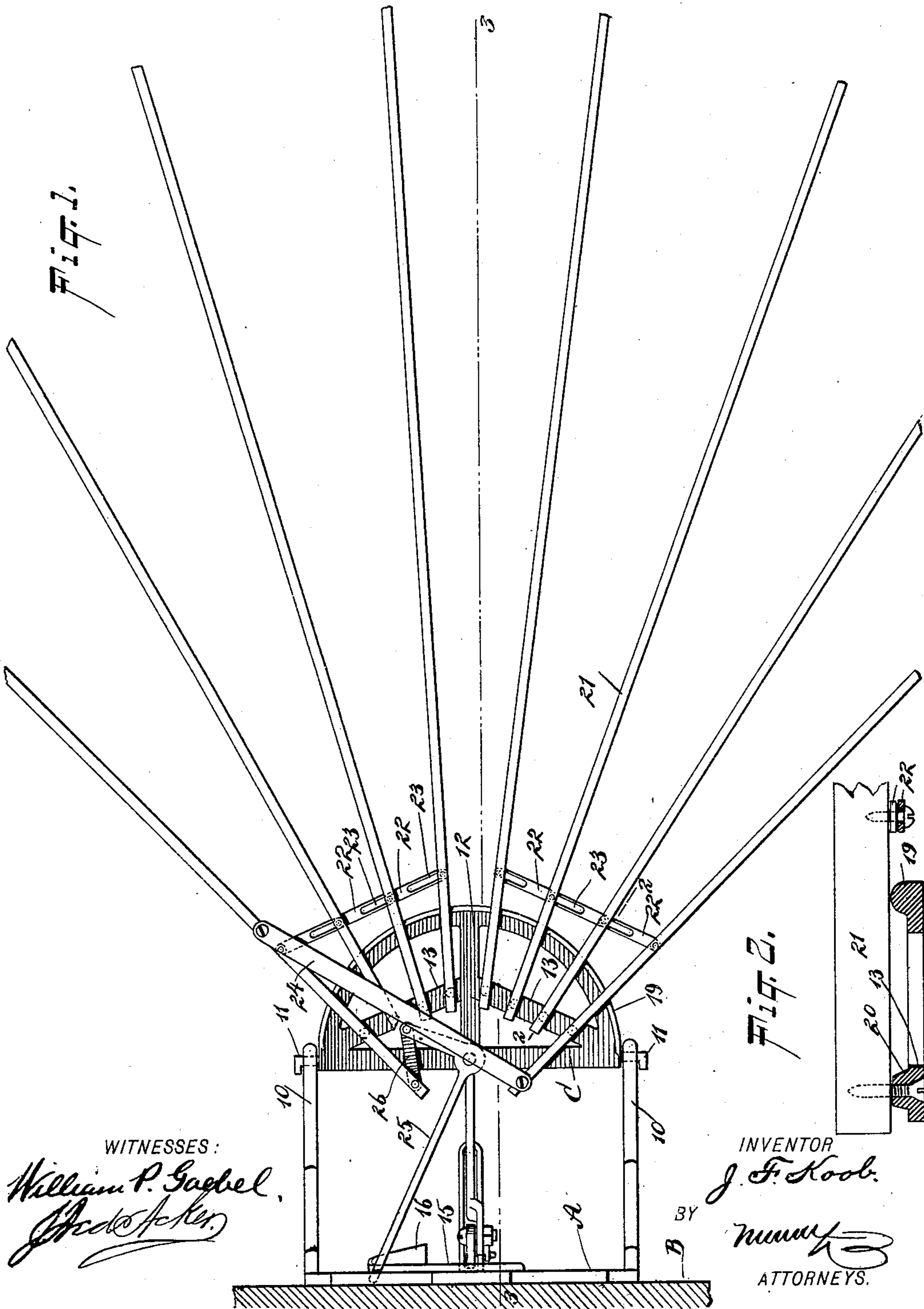
Patented June 6, 1899.

J. F. KOOB.
CLOTHES RACK.

(Application filed Dec. 1, 1897. Renewed Nov. 17, 1898.)

(No Model.)

2 Sheets—Sheet 1.



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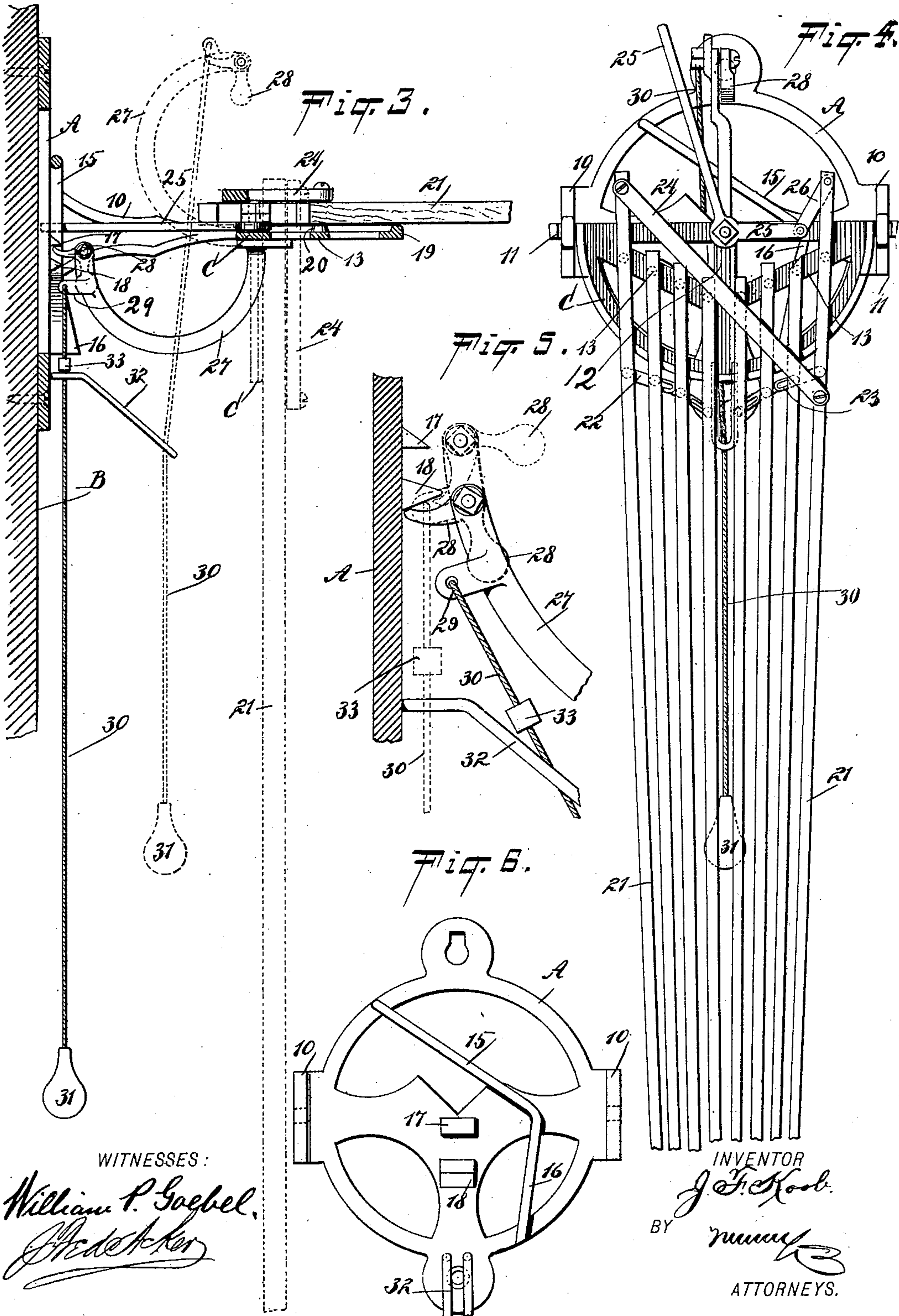
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(No Model.)

2 Sheets—Sheet 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN F. KOOB, OF UNION, HUDSON COUNTY, NEW JERSEY, ASSIGNOR OF
ONE-HALF TO ALEXANDER J. ACKERMANN, OF SAME PLACE.

CLOTHES-RACK.

SPECIFICATION forming part of Letters Patent No. 626,618, dated June 6, 1899.

Application filed December 1, 1897. Renewed November 17, 1898. Serial No. 696,739. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. KOOB, of the township of Union, in the county of Hudson and State of New Jersey, have invented a new and Improved Clothes-Rack, of which the following is a full, clear, and exact description.

The object of the invention is to construct a clothes-rack of that type which when not in use will occupy a vertical position and which when in use will occupy a horizontal position, the construction of the rack being such that it will be simple, durable, and economic, and to provide a means whereby when the rack is in a vertical position the slats of the rack will be quite close together, the rack at that time occupying but little space, and whereby, further, when the slats are raised to a horizontal position they will be automatically spread apart, so as to afford a maximum surface for drying purposes.

A further object of the invention is to provide an automatic locking device for holding the slats of the rack in a horizontal position, which locking device may be tripped by a person standing on the floor, no matter at what elevation the rack may be.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of the improved rack in its horizontal position. Fig. 2 is an enlarged transverse section on the line 2 2 of Fig. 1. Fig. 3 is a vertical section on the line 3 3 of Fig. 1. Fig. 4 is a front elevation of a rack when folded or in its vertical position. Fig. 5 is an enlarged detail sectional view of the back or bracket plate and the locking-arm for the body or supporting-plate of the rack, and Fig. 6 is a front elevation of the back or bracket plate.

A represents a back plate or bracket, from each side of which an arm 10 is outwardly projected. In these arms 10 the trunnions 11 of a body or supporting-plate C are journaled, the back plate or bracket being adapt-

ed for attachment to a wall B or other support. The body or supporting-plate C is preferably of semicircular form and of skeleton construction, the front and back portion being connected by a central transverse bar 12, and the said body or supporting-plate is further supported by longitudinal brace-bars 13, which extend from the sides at the back to the central bar 12, the longitudinal brace-bars 13 being more or less diagonally placed to meet the central bar 12 at or near a central point, as shown in Fig. 1.

A diagonal track 15 is formed upon the back plate or bracket A, as shown in Fig. 6, the said diagonal track at its lower edge being carried downward to form a more or less straight continuation 16. At the central portion of the back plate or bracket two teeth 17 and 18 are formed, the lower face of the upper tooth 17 being straight and its upper face inclined, whereas both the upper and the lower faces of the lower tooth 18 are inclined, as shown in Fig. 5. At the front or circular portion of the body or supporting-plate C a rib 19 is formed upon the upper surface of the plate, and bosses 20 are formed upon the diagonal brace-bars 13 at predetermined intervals apart. These bosses are adapted to receive the pivot-pins of rails or slats 21, adapted to carry the articles to be dried. These slats are arranged in sets, each set comprising a predetermined number of bars, and the sets are arranged at each side of the center of the body or supporting-plate C, as shown best in Fig. 1.

In front of the body or supporting-plate C the slats of each set are connected by links 22 or plates pivotally attached to the slats at one end and provided at the opposite end with slots 23, receiving pivot-pins projected downward from the slats. The outer slats of each group extend farther rearward beyond their pivot-points than the other slats, and the connecting-bar 24 is pivoted to the rear end of one of these outer slats and to the outer slat of the opposite group, the pivotal connection with this latter slat being made in front of the pivot-point for the slat, as is also shown in Fig. 1, so that when the outer slat of one group is carried in direction of one side of the device all of the slats will be spread apart,

the distance between the slats being regulated by the length of the links 22. The spreading of the slats is usually brought about by an angle-lever 25, the longer member whereof is adapted to engage with the inclined track 15 on the back plate or bracket, and the shorter member of said angle-lever is pivotally connected by a link 26 with the rear end portion of the outermost slat, with which the connecting-bar 24 is connected at a point in front of the pivot of said slat, as shown in Fig. 1.

An arched bar 27 is secured to the under face of the body or supporting-bar, the said arched bar being carried rearward and upward, and upon the free end of this arched bar 27 a pawl 28 is pivoted, weighted at one of its ends to overbalance the head portion of the pawl, the said pawl being adapted to engage with either of the teeth 17 or 18. A projection 29 is formed upon the arched bar 27 near the pivot of the pawl 28, the extension being carried rearward, and one end of a cord or a chain 30 is secured to this extension, the cord being adapted to pass through a guide 32, secured to the bracket or back plate A at a point below the teeth 17 and 18. The guide is so formed that its upper portion is horizontal, or that portion which is attached to the back plate, while the forward portion or section of the guide is given a downward and a forward inclination, as is particularly shown in Figs. 3 and 5. A stop 33 is secured upon the rope or chain 30, which limits the downward movement of said rope or chain.

In operation, supposing the slats to be in a vertical position, as shown in Fig. 4, and it is desired to use the rack, the rope or chain, which at this time will be at the forward end of the guide 32, is drawn downward and at the same time carried rearward, whereupon the arched bar or arm 27, which at this time will be in the upper position, (shown in dotted lines in Fig. 3,) will be carried downward or brought to the horizontal position, (shown in positive lines in Fig. 3,) the pawl engaging with the under face of the upper tooth 17. As the arched bar is brought downward to a horizontal position and the slats are carried also to the horizontal position the longer member of the lever 25 will travel down the inclined surface of the track 15 and will cause the slats to spread apart, assuming the position shown in Fig. 1. When it is desired to drop the slats, bringing them to the vertical position, (shown in dotted lines in Fig. 3 and in full lines in Fig. 4,) the rope or cord 30, which is preferably provided at its lower end with a knob 31, is drawn downward and carried outward to the outer or lower end of the guide 32, drawing the arm 27 downward until the pawl passes the tooth 18. When the rope is released, the pawl 28 upon striking the lower tooth 18 will be so turned that its weighted end will be carried upward to the position shown in dotted lines in Fig. 5, and the pawl will readily pass by the teeth 17 and 18, enabling the slats and their support-

ing-frame to assume the vertical position. (Shown in Fig. 4.)

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A clothes-rack consisting of a pivoted supporting-plate, slats pivoted upon the supporting-plate and arranged in pivotally-connected sets, a lever connected with the sets of the slats, and a guide-track for the lever whereby the slats are automatically spread when they are brought to a horizontal position, substantially as set forth.

2. In a clothes-rack, the combination, with a back plate, a supporting-plate pivoted thereto, and slats pivoted on the supporting-plate, of a link connection between the slats, and a connecting-bar uniting the outermost slats, a lever attached to one of the outermost slats, and an inclined track upon which the said lever travels when the slats are brought to a horizontal position, as specified.

3. In a clothes-rack, the combination, with a back plate having an inclined track, a supporting-plate carried by the back plate, slats pivoted upon the supporting-plate and arranged in sets, and link connections between the slats of each set, of a bar pivotally connecting the outermost slats of the sets, a lever fulcrumed upon the supporting-bar and connected with one of the outermost slats, the lever being adapted to travel on the inclined track, and means for raising the supporting-plate to a horizontal position and locking the plate in such position, as described.

4. In a clothes-rack, the combination, with a back plate, a supporting-plate pivotally connected with the back plate, an inclined track formed upon the back plate, slats pivoted upon the supporting-plate, the outermost slats extending farther rearward than the intermediate slats and said slats being arranged in groups, and link connections between the slats of a group, of a bar pivoted to one of the outermost slats at the rear of its pivot and connected with the opposing outermost slat in advance of the pivot of such slat, a lever connected with one of the outermost slats, adapted when the slats are brought to the horizontal position to travel along the inclined track and spread said slats, an arm carried rearward from the supporting-plate, a pawl carried by the said arm, teeth located on the back plate and adapted for engagement with the said pawl, and means for bringing the pawl into or out of engagement with the teeth of the back plate, substantially as described.

5. In a clothes-rack, the combination, with a back plate provided with an inclined track, a supporting-plate pivoted to the back plate, slats arranged in groups, pivoted on the supporting-plate, the outermost slats extending beyond the intermediate ones, links connecting the slats of each group, and a connecting-bar pivoted to one of the outermost slats at the rear of its pivot and to the opposite outer-

most slat in advance of its pivot, of an angle-lever pivoted on the supporting-plate, a link connection between the angle-lever and one of the outermost slats, an arched arm extending rearwardly from the supporting-plate, a gravity-pawl carried by the said arm, teeth carried by the back plate, adapted to be engaged by the said pawl, a guide attached to the back plate, and a rope or chain attached to the said arm and extending through the said guide, for the purpose set forth.

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Witnesses:

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