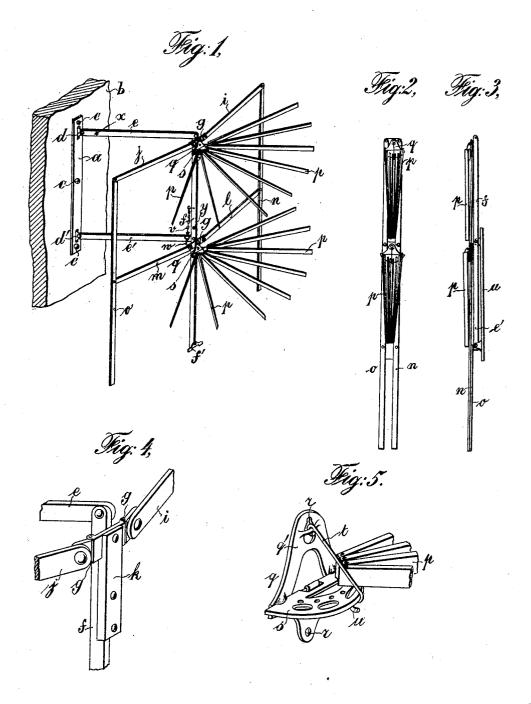
J. GRÜNINGER. FOLDING CLOTHES RACK. APPLICATION FILED OCT. 31, 1904.



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## UNITED STATES PATENT OFFICE.

JOSEPH GRÜNINGER, OF NEW YORK, N. Y.

## FOLDING CLOTHES-RACK.

No. 814,370.

Specification of Letters Patent.

Patented March 6, 1906.

Application filed October 31, 1904. Serial No. 230,662.

To all whom it may concern:

Be it known that I, Joseph Grüninger, a citizen of the United States of America, and a resident of the borough of the Bronx, in the county and State of New York, have invented certain new and useful Improvements in Folding Clothes-Racks, of which the following is a specification.

This invention has reference to clothesracks, and pertains particularly to folding clothes-racks which may be unfolded when it is desired to use them and folded up when they are not in use. These folding clothesracks, therefore, are always on hand when racks, therefore, are always on the their service

is not required.

The novel clothes-rack is preferably secured to a wall in the kitchen. It is rather light and occupies little space when folded together. When unfolded, however, it presents a substantial appearance, owing to its construction. The rack holds a great deal of clothes or wash; still it is very plain and is manufactured cheaply and is a household

25 commodity.

The novel clothes-rack consists, essentially, of a folding rack composed of single hinged bars or members. This device stands on the floor when unfolded. Attached thereto and in front of same are two folding devices having radial members. The combination of these devices is such that each part may be folded or unfolded singly or in combination with one or all other parts. When a few pieces of wash or clothes have to be dried only, then it may suffice to draw out one of the elements of the device alone. When many pieces have to be dried, then, of course, all the parts of the device have to be em-

The invention is illustrated in the accom-

panying drawings, in which—

Figure 1 represents in perspective view an unfolded clothes-rack which embodies my invention. Fig. 2 illustrates in front elevation the rack when folded together. Fig. 3 shows the folded rack in side elevation. Fig. 4 illustrates in detail joints with hinges which permit of moving the exterior vertical side members backward under any angle less than ninety degrees, and Fig. 5 shows a securing device of the element having radial members with some of its bars or members left off.

Similar letters of reference denote like

55 parts in all the figures.

In the drawings in Fig. 1, a represents the 1

wooden vertical rear bar which is secured to the wall b by means of the screws c. A small iron support d is provided near the top end of the bar a, to which the horizontal 60 member e is movably attached. A like iron support d' is located at the lower end of the bar a, arranged in reverse order, so that the horizontal bar e' is in a different horizontal plane than the bar e, which is necessary for folding up the device. The two bars e and e' are connected at different ends by a vertical bar f, which extends below the bar e', resting with its bottom end f' on the floor. It is plainly understood that the top end of the bar f is secured to one side of the bar e, while the center portion is secured to the other side of the bar e', owing to the fact that the iron supports d and d' are not in the same vertical plane.

Near the top front end of the bar f there is provided a double hinge gg, as shown in detail in Fig. 4. To this hinge are attached the horizontal side bars i j. A wooden bar k is permanently fixed to the bar f and the hinge g. The hinge g is so constructed that the bars i j may be moved backward, but cannot be moved forward farther than at a right angle to the bars e e'. In like manner two horizontal bars l m are secured to the center g portion of the vertical bar g right below the horizontal bar g. The four bars g g g g g g are connected at their ends to the long vertical bars g g on These latter bars are as long as the bar g and extend below the bars g g and g

stand with their ends on the floor.

The radial device is permanently attached to the wooden block k. The single radial members or bars p are secured to an iron support q. (Shown in detail in Fig. 5.) This 95 support consists of an iron frame  $\check{q}'$ , provided with two openings r r, through which it is screwed onto the wooden block k. The top opening, however, is covered in Fig. 5 by other parts of the support. Near the center 100 of the frame there is provided a semicircular platform s, which moves on hinges, so that it may be parallel with the frame, or lifted up, so as to extend at a right angle thereto. The single radial bars p are movably secured to 105 the platform s in such a manner that they may be folded together, as shown in Fig. 2, and spread out sidewise, as shown in Fig. 1. When the device is in operation, then the platform s is lifted up and held in a position 110 rectangular to the bar f by means of the wire t, which is movably secured to the top por-

tion of the frame s. The wire t has a hook uat its bottom end which engages the center portion of the platform, as shown in Fig. 5. The hook of the wire is easily pushed un-5 der the platform, whereby the same will be substantially supported. The wire t passes between two bars p, and when it is desired to fold up the radial device then all that is necessary is to lift the wire off from the platform, 10 when same will swing down. A second radial device is provided below on the  $\mathrm{bar} f$  on a wooden block k near the point where the bars *l m* are secured on the bar f.

In order to hold the rack securely together 15 when folded up, a chain v with pin w is provided on the long vertical bar f. Near this chain and in the bar f there is a small opening y, and a like small opening x is contained in the bar e. Both openings coincide when the rack is folded up. The pin is inserted in both openings to keep the rack together, while the mere drawing out of said pin releases all parts of the rack and same may be unfolded.

The device is operated in the following manner: Assuming that the rack has been permanently secured to a wall in the kitchen and is folded together, as shown in Fig. 2, when it is now desired to use the rack then the pin w is removed and the vertical side 30 bars n o are drawn out first, then the bar fmoved forward, whereby the ends of the vertical bars will come to rest on the floor. radial device is now lifted up by means of the platform s, the wire t pushed under the platform, and the single bars p spread out, when the rack is ready for use. The side bars n o are preferably moved somewhat backward, which gives the rack a firm stand on the

In the described manner I have produced

a durable, plain, and effective clothes-rack which is cheaply manufactured and occupies but little room when not in use, while it is ever ready for use when clothes or wash have to be dried. It is a valuable household com- 45 modity, which can be easily operated by any-

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

1. A folding clothes-rack comprising a rear bar having two small supports arranged in reverse order near its ends, one horizontal wooden bar movably secured to each support, a long vertical bar movably secured alter- 55 nately to the side ends of the horizontal bars, stop-hinges permanently fixed one to the top front end of the vertical bar and one to its center, horizontal side bars connected to the hinges, long vertical bars connecting each 60 two of the last-named horizontal side bars, blocks secured one to the center front portion of each hinge, a support on each block, and a device thereon having radial members.

2. In a folding clothes-rack the combina- 65 tion of a rear bar, movably-connected horizontal and long vertical front bars, connecting side bars between said front bars connected to stop hinges so that the exterior, long front bars may be moved backward, 70 with blocks secured one to each hinge, a support on each block, and a device thereon having radial members.

Signed at New York, N. Y., this 25th day of October, 1904.

JOSEPH GRÜNINGER.

Witnesses:

Ludwig K. Böhm, James J. Astarita.