No. 742,581. PATENTED OCT. 27, 1903.

F. F. BURTCH

BROOM RACK.

APPLICATION FILED MAR. 14, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1.

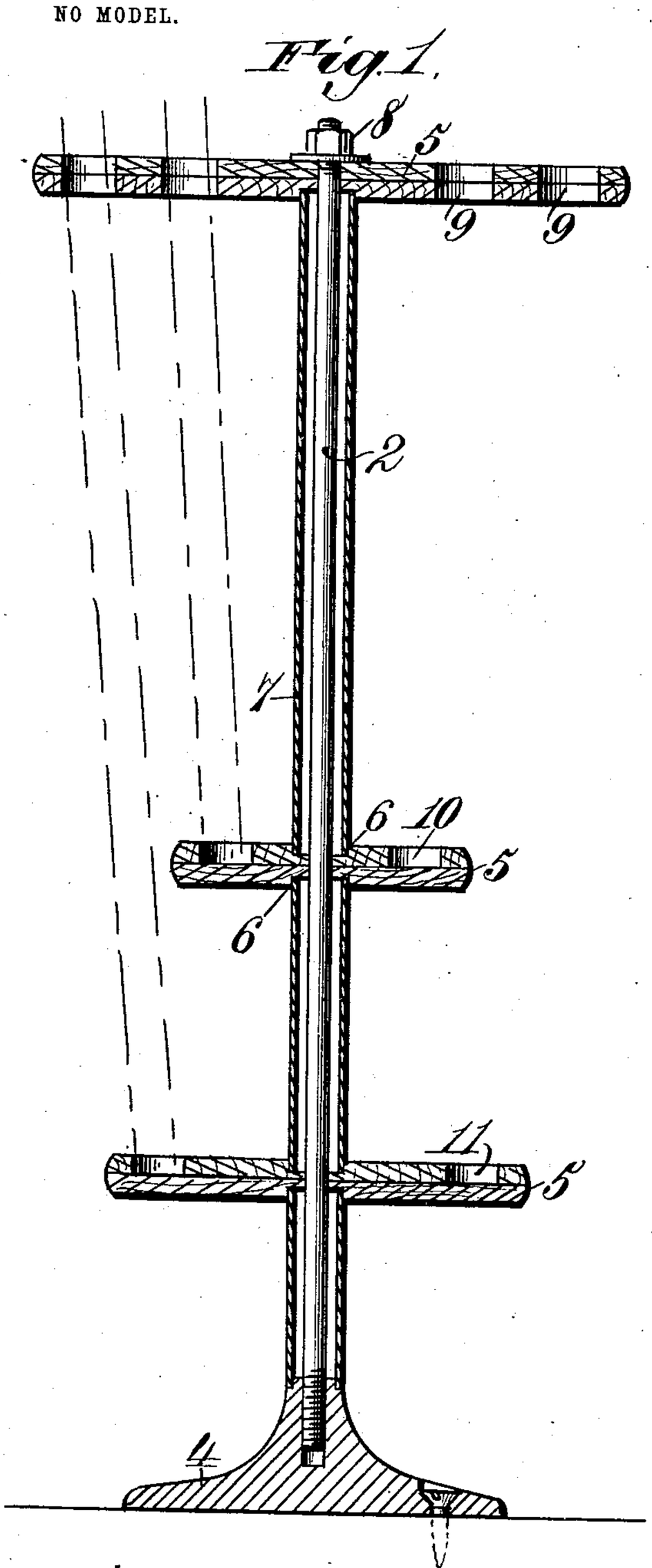


Fig. 2.

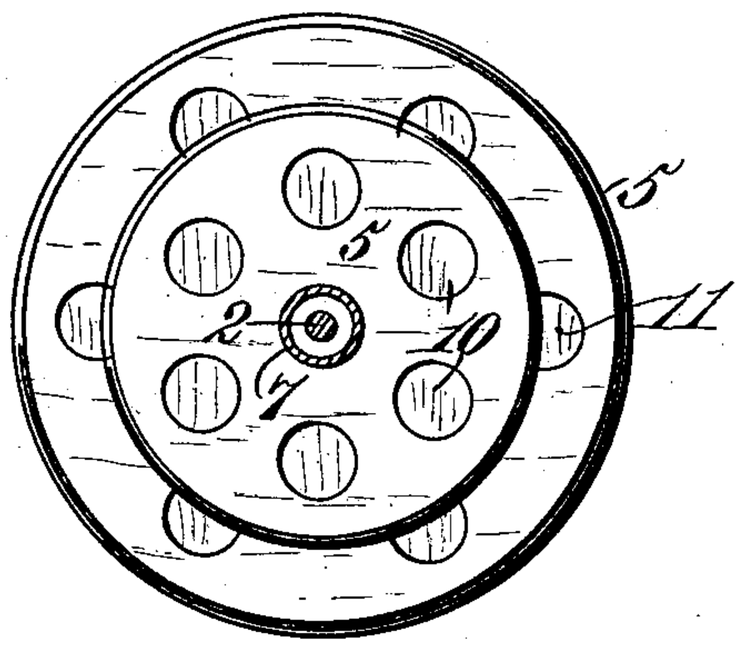


Fig. 3.

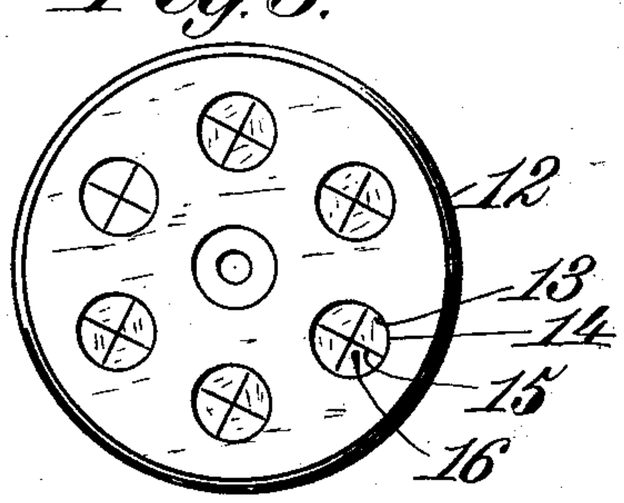
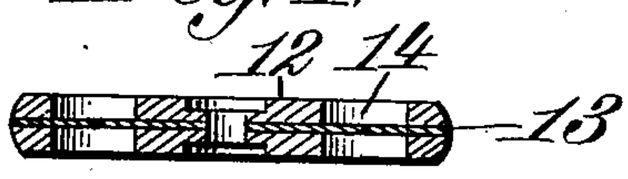


Fig. 4.



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BROOM RACK.

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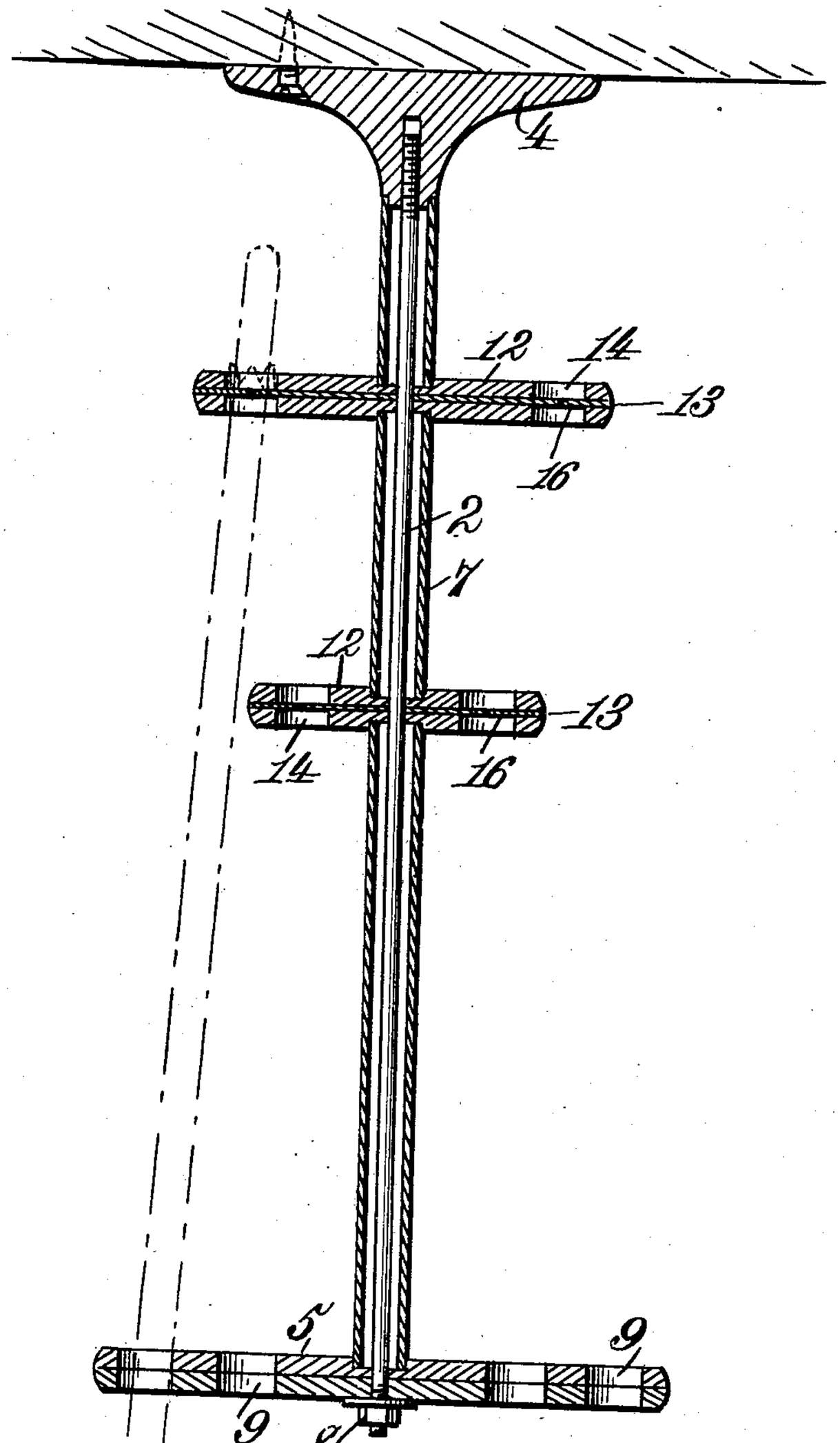
NO MODEL. 2 SHEETS—SHEET 2.

Fig. 5.



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No. 742,531. Patented October 27, 1903.

UNITED STATES PATENT OFFICE.

FRANK F. BURTCH, OF FONDA, NEW YORK.

BROOM-RACK.

SPECIFICATION forming part of Letters Patent No. 742,581, dated October 27, 1903.

Application filed March 14, 1903. Serial No. 147,839. (No model.)

To all whom it may concern:

Be it known that I, FRANK F. BURTCH, a citizen of the United States, residing at Fonda, in the county of Montgomery and State of New York, have invented new and useful Improvements in Broom-Racks, of which the following is a specification.

This invention relates to broom-racks; and the object of the invention is to provide a simple and effective article of this character which occupies but very small space both as to height and width, whereby a number of them may be placed in a store within a comparatively small compass.

The device is of such character that it may be fastened to a floor, ceiling, or other support, provision being made for securely holding the brooms in place when the device is suspended from a ceiling.

The rack is thoroughly strong, its parts can be quickly assembled and inexpensively made, and when set up it is adapted to carry a large number of brooms, which can be easily removed therefrom.

The invention is shown in one simple and convenient embodiment thereof in the drawings forming a part of this specification, in which—

Figure 1 is a longitudinal central sectional elevation of a broom-rack including the invention. Fig. 2 is a sectional plan view, the section being taken just above the intermediate disk. Fig. 3 is a plan view of a modified form of disk adapted particularly for use in connection with a hanging rack. Fig. 4 is a cross-section of the same. Fig. 5 is a view corresponding to Fig. 1, showing the rack organized for suspension from a ceiling and as involving disks constructed in accordance with that illustrated by Figs. 3 and 4.

Like characters of reference denote corresponding parts throughout the several views.

Although the improved article disclosed hereby is primarily adapted for use as a broom-rack, it will be apparent from an examination of the annexed drawings that it may be used with equal facility for receiving and exhibiting other articles, and therefore it is not my intention to limit myself to any particular use of the invention.

Referring to Fig. 1, it will be seen that the improved broom-rack selected for illustration involves in its construction a central rod 2, which is generally circular in cross-section and which may be made of any suitable material and length. In the form of the device illustrated in Fig. 1 the lower end of the rod 2 is tapped for a proper distance into the base or foot 4. This base or foot may be attached to a floor, counter, or other support by screws or equivalent means in order to hold the column or rod 2 in a vertical position, at which time the heads of the brooms will be up, or what I have termed the "base" or "foot" may be attached to a ceiling, and in this case the part so termed would constitute a head. In this event the upper end of the rod 2 would be tapped into the headpiece. I have simply used the terms "lower" and "upper" for convenience in description, for, as just stated, the attaching member 4 may be either secured to a floor or ceiling. In the latter case the rod or column 2 would be suspended from the ceiling and the heads of the brooms would be down, as shown by Fig. 5. When the heads are in the relation just specified, means are provided for positively securing the handles against falling from the disks, hereinafter described, which carry them.

The brooms are carried by superposed disks, each denoted by 5 and which are generally made of wood, although this, of course, is not essential. When these disks are made of wood, they consist, preferably, of two complemental sections glued together, with the grain of the respective sections running at right angles to each other in order to secure strength. The said disks 5 are centrally perforated, and the rod 2 passes through such central perforations. The upper and lower sides of what are represented in Fig. 1 as the lower disks are centrally counterbored, as at 6, the top disk having a similar counterbore, also denoted by 6, in its under side. Said central rod or column is closely embraced by sleeves 7, of some suitable metal, which are shown as being three in number, the upper sleeve being between the two upper disks, the intermediate one between the two lower disks, and the lower one being below the lowest disk. The ends of the topmost sleeve, which, it will be seen, is somewhat longer than the other two, closely fit the lower and

upper counterbores in the two topmost disks, while the intermediate sleeve is similarly fitted in the counterbores on the under and upper sides of the two lower disks, the final or lowest sleeve fitting in the under counterbore in the lowest disk and resting upon the upper flat side of the base 4.

It will be obvious that the rack, consisting of the base, rod, sleeves, and disks, can be easily and quickly put together, and when the parts are assembled they constitute a thoroughly stable structure, which is an important point, as they support a relatively considerable weight.

The upper end of the rod 2 is shown as threaded to receive a nut 8, between which and the topmost disk 5 a washer, serving its usual purpose, is fitted, the nut of course acting to hold the several parts together.

While I have termed the parts 5 "disks," it is apparent, of course, that they need not be of circular form, the term mentioned being simply adopted for convenience in description. The uppermost disk has two series of perforations, each denoted by 9 and which are concentrically disposed with respect to the rod 2. The intermediate disk, which, it will be seen, is of somewhat smaller diameter than the upper one, has a series of sockets 10, also concentrically arranged with respect to said rod, but nearer the same than either of the said series of perforations. The lowermost disk has a circular series of sockets 11, which sockets, like the other sockets, are also concentric with respect to the said rod. The handles of a series of brooms are adapted to be thrust from the upper side of the uppermost disk through the inner series of perforations 9 and passed downward until their outermost ends are seated in the sockets 10 of the intermediate disk. The same procedure is followed with respect to a second set of brooms, which are passed through the outermost series of perforations 9 in said uppermost disk and are passed downward until their outer ends are seated in the sockets 11 in the lowest disk. By arranging the sockets 10 nearer the central rod 2 than the inner series of perforations 9 in the upper disks and the sockets 11 nearer said rod than the outer series of perforations 9 the handles of the brooms are disposed angularly relatively to said rod and in parallelism with each other. Any one or more of the brooms can be withdrawn with facility and as easily replaced. At the same time the brooms are exhibited to excellent advantage, while, as previously set forth, the rack occupies but very small space, which is an important consideration in a store carrying a large amount of merchandise.

I have described the article in detail as adapted for mounting upon a floor, although it has been indicated that the same could be suspended with equal advantage from a ceiling; but in the latter event means should be provided for preventing the brooms from falling from place. Such means are shown in detail in Figs. 3 and 4 of the drawings, and a complete rack and organized for suspension from a ceiling is illustrated in Fig. 5. In the case of the modified form of rack what are shown as the two upper disks are of the kind illustrated in detail in Figs. 3 and 4. Referring to such figures, the numeral 12 denotes a modified form of disk, which, as is shown, consists of two sections suitably-secured together and an intermediate sheet of rubber 13. The sections of the disk have perforations 14, arranged concentrically with respect to the opening in the disk, through which the rod 2 passes. The sheet of rubber 13 at points coinciding with the said perforations 14 has right-angular intersecting cuts 15, the outer ends of which extend practically to the walls of the respective perforations. The formation of these intersecting cuts provides a series of yieldable fingers 16, through which a broom-handle is adapted to be thrust, whereby the fingers will grip the handle with a force sufficient to prevent the broom from dropping when the rack is supported from a ceiling; but the purchase of the fingers upon the broom-handles should not be too great to prevent their ready withdrawal by hand. These perforations provided interiorly with the broom holding or gripping means are employed in lieu of the sockets 10 and 11; otherwise the two disks are the same.

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

1. A broom-rack including a rod, an attaching member connected to one end of the rod and by which the rack can be attached to a floor or other support, a plurality of broom-carrying disks centrally perforated to receive said rod, the intermediate disk and the disk nearest said attaching member having counterbores in their opposite sides, and the outermost disk having a counterbore in its under side, and a plurality of sleeves corresponding in number with the disks, surrounding said rod and located between said disks and said attaching member respectively, and each counterbore receiving an end of a sleeve, and the undermost sleeve fitting against said attaching member.

2. A broom-rack consisting of a rod, a member into which said rod is threaded, a sleeve surrounding the rod and fitted against said member, a disk having a central perforation to receive said rod and having central counterbores upon its opposite faces into one of which said sleeve fits, a second sleeve surrounding the rod and fitting in the other counterbore, a second disk centrally perforated to receive the rod and counterbored upon its opposite faces, one of which counterbores receives said second sleeve, a third sleeve fitted in the other counterbore of the second disk, a third disk centrally perforated to receive the rod and counterbored in one face to receive the third sleeve, the first and

second disks having broom-receiving openings and the third disk having broom-receiving perforations concentrically arranged with respect to said rod, and means connected with the rod for holding the parts in assembled relation.

3. A broom-rack consisting of a rod, an attaching member into which said rod is threaded, a sleeve surrounding the rod, fitted against said attaching member, a disk having a central perforation to receive said rod and central counterbores upon its opposite faces into one of which said sleeve fits, a second sleeve surrounding the rod and fitting in the other counterbore, a second disk centrally perforated to receive the rod and counterbored upon its opposite faces, one of which counterbores receives the second sleeve, a third sleeve fitted in the other counterbore of the second disk and a third disk centrally perforated to receive said rod and counterbored in one face to receive the third sleeve, the first and second disks having broom-receiving sockets arranged in a circular order concentric to the said rod and the third disk having two series of circular perforations, one within the other and arranged concentrically with respect to said rod, said first and second disks being of less diameter than the first one, and a nut bearing against the outer face of the third disk and in threaded engagement with the adjacent end of said rod.

4. A broom-rack including a rod, an attaching member connected to one end of the rod and by which the rack can be attached to a floor or other support, a plurality of broom-carrying disks centrally perforated to receive said rod, the intermediate disk and the disk nearest said attaching member having counterbores in their opposite sides, and the outermost disk having a counterbore in its under side, and one of the disks having two perforated sections and an intermediate rubber sheet having transverse cuts registering with the perforations therein, and a plurality of sleeves corresponding in number with the disks, surrounding said rod and located between said disks and said attaching member respectively, and each counterbore receiving an end of a sleeve, and the undermost sleeve fitting against said attaching member.

I testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRANK F. BURTCH.

Witnesses:
HARRY H. DOCKSTADER,
JAMES F. CURTIN.