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PATENTED JAN. 23, 1906.

E. L. REED.
RACK FOR CRACKER CANS.
APPLICATION FILED AUG. 2, 1905.

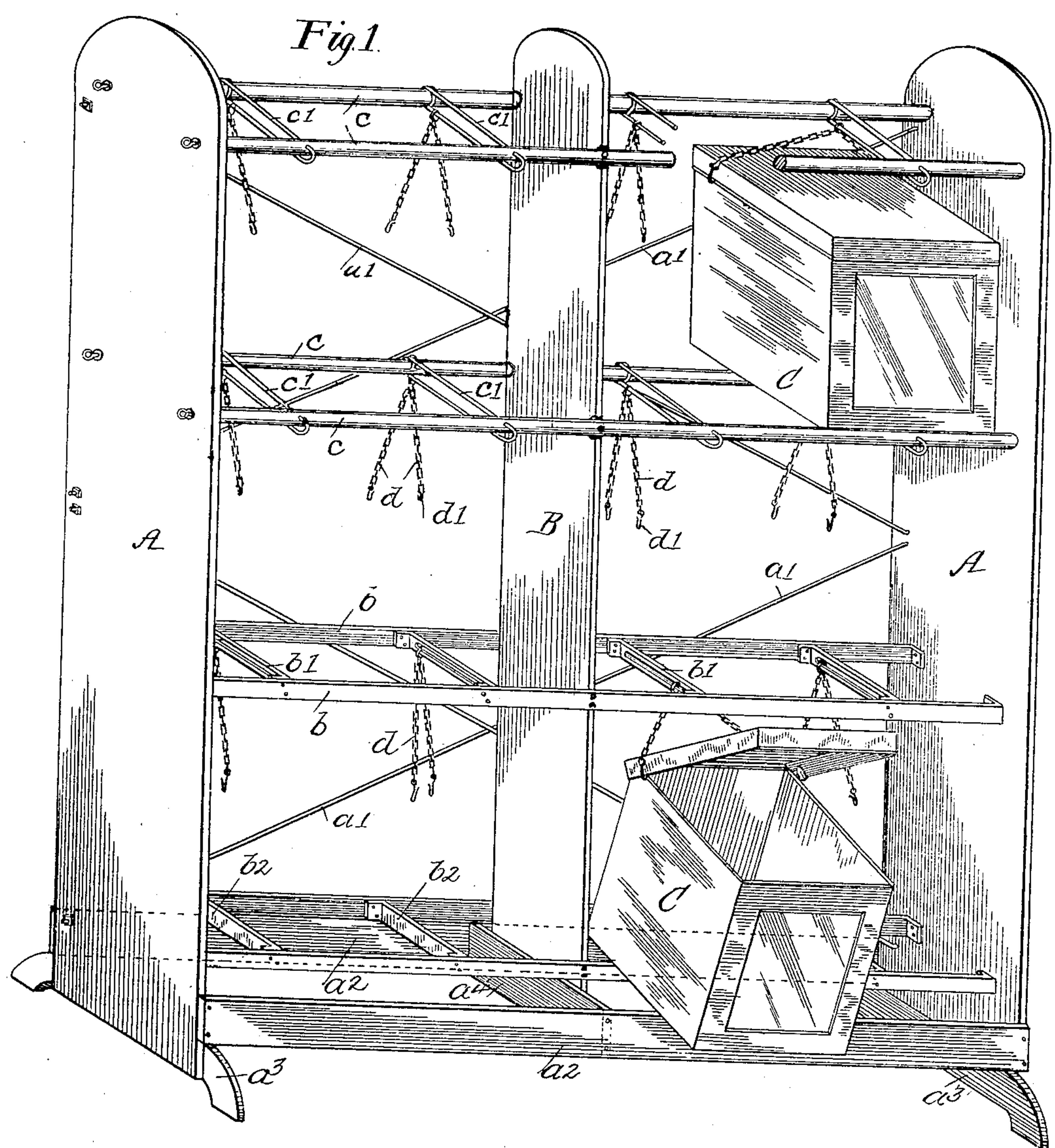


Fig. 2.

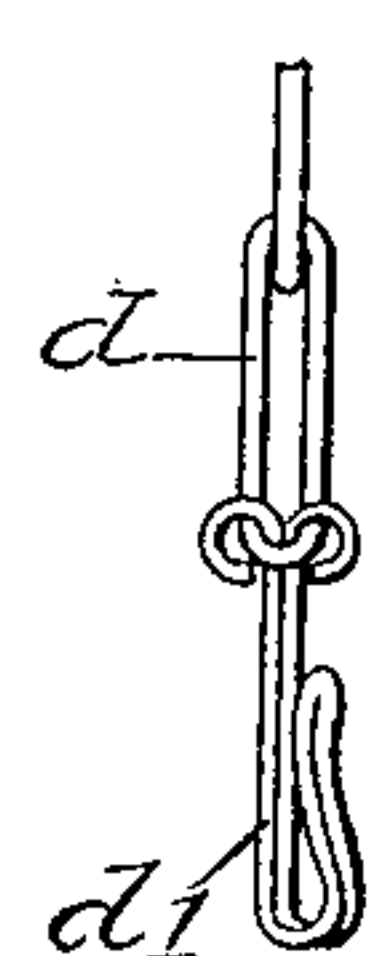
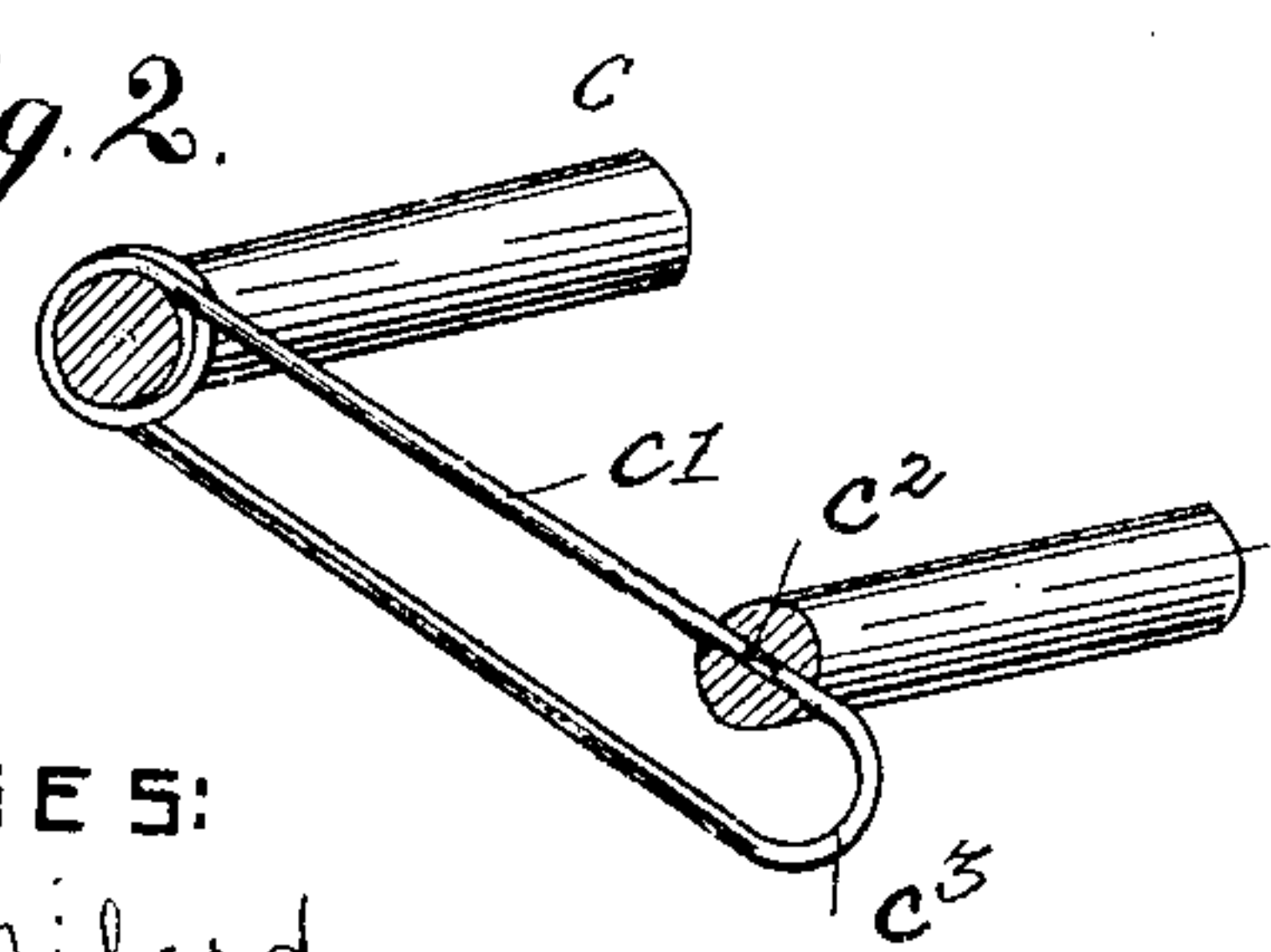


Fig. 3.

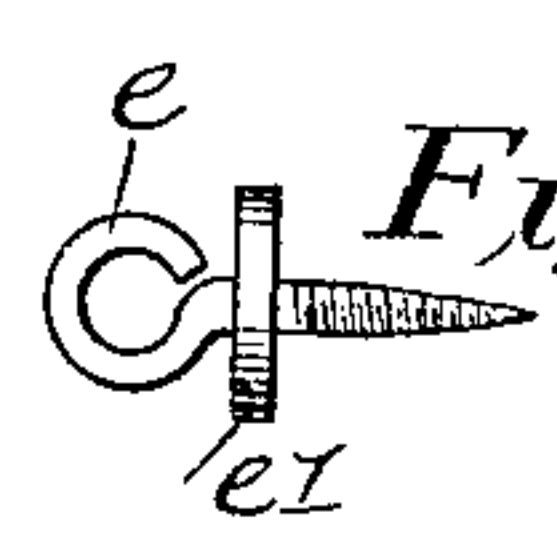


Fig. 4.

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EVAN L. REED, OF OREGON, ILLINOIS.

RACK FOR CRACKER-CANS.

No. 810,566.

Specification of Letters Patent.

Patented Jan. 23, 1906.

Application filed August 2, 1905. Serial No. 272,280.

To all whom it may concern:

Be it known that I, EVAN L. REED, a citizen of the United States, residing at Oregon, in the county of Ogle and State of Illinois, have invented certain new and useful Improvements in Racks for Cracker-Cans, of which the following is a specification.

This invention relates to improvements in racks for holding and supporting boxes, and more especially cracker cans or boxes of the type commonly used in grocery-stores, in which the contents are displayed through a glass panel in the front of the can and from which the contents are removed by raising a cover hinged at the back of the can.

The especial object of my improvements is to produce a strong and substantial yet lightweight rack which can be shipped in knock-down form and readily assembled by the user in the form of which the cans may be moved back and forth on the rack without danger of falling off either at the front or back and in which the covers will be automatically raised by drawing forwardly the cans, thus affording quick and convenient removal of the contents without taking the cans from their supporting-shelves.

Other objects of economy in construction and arrangement are conserved by the improvements which form the subject-matter of this application and which are shown in approved forms in the accompanying drawings, in which—

Figure 1 is a perspective view of a rack constructed according to my invention. Fig. 2 is a detail, on an enlarged scale, showing one form of can-holding bar. Fig. 3 is a detail of a hook which forms an element of the cover-operating means. Fig. 4 is a detail of a screw-eye preferably used in putting together my rack.

Referring to the drawings in detail, A A represent the upright end boards of the rack, which are secured at their lower ends to the base-pieces a^3 and are connected together by metal rods a' , diagonally arranged at the back of the rack, and by longitudinal strips a^2 , arranged near the lower end of the boards A. A cross-brace a^4 connects the two strips a^2 together at a point about midway the end boards. The manner of connecting and bracing the end boards may vary, depending on the size of the rack and matters of economy in construction.

B represents an upright board arranged midway the end boards, secured at its lower

end to the cross-brace a^4 and held in position by the bars b and c , to be described.

b b are flat metal bars arranged horizontally in pairs and having their ends bent at right angles and bolted or screwed to the inner face of the end boards. Said bars are also suitably secured to the edges of the middle board B.

b' represents cross-bars, which are of metal and have their ends bent at right angles and bolted or screwed to the inner faces of the longitudinal bars b . Each cross-bar is so placed as to be over the center of a cracker-can below it and under the center of the can above it. A longitudinal slot is formed in each cross-bar, and slidably mounted on the bar is a holder consisting of a chain d , having hooks d' on its ends adapted to embrace the side edges of the can-cover. The connection between cross-bar and chain is by a link or ring arranged at the center of the chain and adapted to slide loosely on the bar b' and through the slot.

Instead of using the flat metal longitudinal bars b I may use the wooden rods c , which are circular in cross-section and have their ends secured to the end boards by screw-eyes e , supplied with washers e' . These screw-eyes are inserted through the end boards and engage the ends of the rods and when screwed up will draw the rods and end boards closely together. Any other suitable means or method may be used for connecting these parts together. Where the round wood rods are adopted, I preferably use the cross-bars c' , each of which is formed of a single piece of wire bent to encircle the rear rod and having one of its ends bent to form a hook c^3 and both ends inserted in a hole c^2 , bored in the front rod, as clearly shown in Fig. 2. These cross-bars are also arranged to lie above and below the center of the cans, and the hook portion projects forwardly from the front bars c , thus allowing the cans to be pulled forwardly the desired distance. The cover-holding elements d are slidably arranged on the lower wire of the bars in substantially the same manner as on the bars b' . It will be noted that the end of the upper wire is lower than upper surface of the front bar c , thus permitting the bottom of the can to rest squarely on the front bar. The construction and connection of the bars c' are such that they serve to tie together the front and rear rods and prevent any spreading apart, and no screws or bolts are required to fix them in

place. The bars *b'* and *c'* also form positive stops for the chain *d* in its forward and rearward movements, and as the chain is connected with the hinged cover of the can the latter cannot be pushed or pulled from the supporting-bars *b* or *c*.

C represents the cracker-cans which are especially adapted for use with my improved rack, though other forms having hinged covers may be used.

It will be observed that the skeleton style of construction used in my rack makes it light and free from dust-catching surfaces, and at the same time it is thoroughly braced. It will be also noted that as the can projects over the longitudinal bars both in front and rear when back in place and when pulled out to get at contents rests on the front longitudinal bar and the cross-bar, thus always having three points of contact. It is evident that this arrangement permits the can to be operated backward and forth with less friction than if it were resting on a solid shelf, thus permitting the use of a skeleton construction with greater efficiency than a solid one.

In shipping the rack it will be knocked down and the bars, rods, and middle board will be packed between the end boards. Screws and bolts will be used instead of nails for joining various parts, and these can be readily applied by the person receiving the rack.

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

1. In a knockdown rack for cracker-cans, end uprights, longitudinal bars detachably secured to said uprights in pairs and connecting the uprights together, said bars forming supports for cracker-cans, cross-bars connecting said longitudinal bars together, and means for detachably holding can-covers, said means slidably mounted on said cross-bars.

2. In a knockdown rack for cracker-cans, end uprights, longitudinal bars detachably secured to said uprights in pairs and connecting the uprights together, said bars forming supports for cracker-cans, cross-bars connecting said longitudinal bars and arranged

to lie over the center of the cans and having a slideway therein, flexible means for holding the can-covers, said means slidably arranged on said cross-bars and adapted to be detachably connected with the can-covers.

3. In a knockdown rack for cracker-cans or the like, end uprights, parallel longitudinal bars detachably secured to the uprights and forming supports for cracker-cans, cross-bars connecting the longitudinal bars together and forming supports for said cans, chains slidably arranged on said cross-bars, said chains having means secured to their ends for detachably holding cans arranged on said longitudinal and cross bars.

4. In a knockdown rack for cracker-cans, end uprights, longitudinal can-supporting bars detachably secured to said uprights, and can-supporting cross-bars connecting said longitudinal bars together, having a slideway therein and arranged to lie over the center of the cans, and means arranged in said slideway for holding the can-covers.

5. In a knockdown rack for cracker-cans, end uprights, parallel can-supporting longitudinal bars detachably secured to said uprights, cross-bars connecting said longitudinal bars together, a middle detachable upright connected with the longitudinal bars, diagonal braces detachably secured to the rear portion of the uprights and so arranged as to limit the rearward movement of the cans.

6. In a knockdown rack for cracker-cans, end uprights, can-supporting longitudinal bars detachably secured to said uprights, means for drawing together the uprights and bars to form a rigid structure, cross-bars detachably connected with the longitudinal bars, and can-holding devices detachably and slidably connected with said cross-bars and adapted to be detachably connected with the covers of the cans.

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

EVAN L. REED.

Witnesses:

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