

UNITED STATES PATENT OFFICE.

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EXHIBITING APPARATUS.

941,118.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES D. WHITTREDGE, a citizen of the United States, and resident of Saugus, in the county of Essex and State of Massachusetts, have invented new and useful Improvements in Exhibiting Apparatus, of which the following is a specification.

My invention relates to apparatus for displaying miscellaneous articles and at the same time testing or demonstrating their capacity to resist strains analogous to those which they are called on to sustain in actual use, and is particularly addressed to the simultaneous exhibition and demonstration of such articles of apparel in which elasticity and tensile strength are desirable characteristics, as, for instance: gloves.

In the drawings hereto annexed, which illustrate an example of my invention,—Figure 1 is a vertical cross section of an apparatus, and Fig. 2 a rear elevation of the same, the rear cover or casing being removed to afford a view of the interior.

A suitable frame or casing, A, open at the front, is provided with a vertical partition A', a curtain A⁴ (which conceals part of the mechanism) a top A², a lower chamber A³, and a shelf or rest R. In the lower chamber A³ the operating mechanism is placed, and therein concealed from view. This mechanism consists of a motor M, preferably an electric motor, on the shaft of which is mounted a worm B⁴, which meshes with the worm-wheel B³. This worm wheel is keyed to the shaft B², upon which also there are keyed spur gears B' at proper points, to mesh with the spur gears B.

Each of the spur gears B carries a crank pin C. Straps S each secured at one end to one of the cranks C, extend upward, over pulleys P' and P, which are secured to the top A² of the casing A, and downward at the front of the casing. Each strap, at its exposed end, is secured to a holder H, herein shown as a clamp, provided with a clamping screw L. Another holder, H' similarly provided with clamping means, h', is secured, as by a short strap S', to the weight W. The two holders, H and H' are secured to the article G, to be exhibited under test. The length of the straps S and S' being properly adjusted, the motor M is started, turning the shaft B² and gears B', by means of worm B⁴ and worm-wheel B³; the gears

B are rotated and the cranks C impart a reciprocating movement to the hoisting devices exemplified in the instance described by the strap S, pulleys P and P' and holders H.

Preferably, the hoisting devices are so arranged and adjusted that the weight W comes to rest on the shelf R at or toward the end of each double reciprocation of the hoisting devices, so that the strain on the article G is slackened, and then again applied; thus subjecting the article to severer usage than would be the case if the weight W never relaxed its pull on the article G. This operation, in its effect on the articles exposed to view under test, affords a striking demonstration of the quality of the articles thus shown.

What I claim and desire to secure by Letters Patent is:

1. In a contrivance for exhibiting articles the combination of holders adapted to seize the article to be exhibited, a weight attached to one holder, hoisting devices attached to the other and means for imparting reciprocal movement to the hoisting devices.

2. In a contrivance for exhibiting articles the combination of holders adapted to seize the article to be exhibited, a weight attached to one holder, hoisting devices attached to the other, means for imparting reciprocal movement to the hoisting devices and a rest to support the weight at the end of each double reciprocation of the hoisting devices.

3. In a contrivance for exhibiting articles the combination of holders, adapted to seize the article to be exhibited, a weight attached to one holder, a hoisting strap attached to the other, a crank to which the other end of the strap is attached, and means to rotate the crank.

4. In a contrivance for exhibiting articles, the combination of holders adapted to seize the article to be exhibited, a weight attached to one holder, a hoisting strap attached to the other, a crank to which the other end of the strap is attached, means to rotate the crank and a rest to support the weight at the end of each double reciprocation of the hoisting devices.

5. In a contrivance for exhibiting articles, a casing, a partition therein forming a front and a back chamber, said partition provided with an opening at or near the top connecting said two chambers, a hoisting strap pass-

ing through said opening and extending
downward on each side of said partition,
means connected with one end of said strap
for imparting reciprocal movement thereto,
5 a holder connected with the other end of said
strap, and a weighted holder, said holders
adapted to seize the article to be exhibited.
6. In a contrivance for exhibiting articles,
the combination of a holder to seize the ar-
10 ticle to be exhibited, hoisting or pulling de-

vices attached thereto adapted to subject
said article to tension, and means for im-
parting reciprocal movement to the hoisting
or pulling devices.

Signed by me at Boston, Massachusetts, 15
this 14th day of October 1909.

CHARLES D. WHITTREDGE.

Witnesses:

CHARLES B. F. DAVIS,
CHAS. P. SMITH.