

(No Model.)

H. A. BUCHHOLZ.
EXHIBITION STAND.

No. 550,779.

Patented Dec. 3, 1895.

Fig. 1.

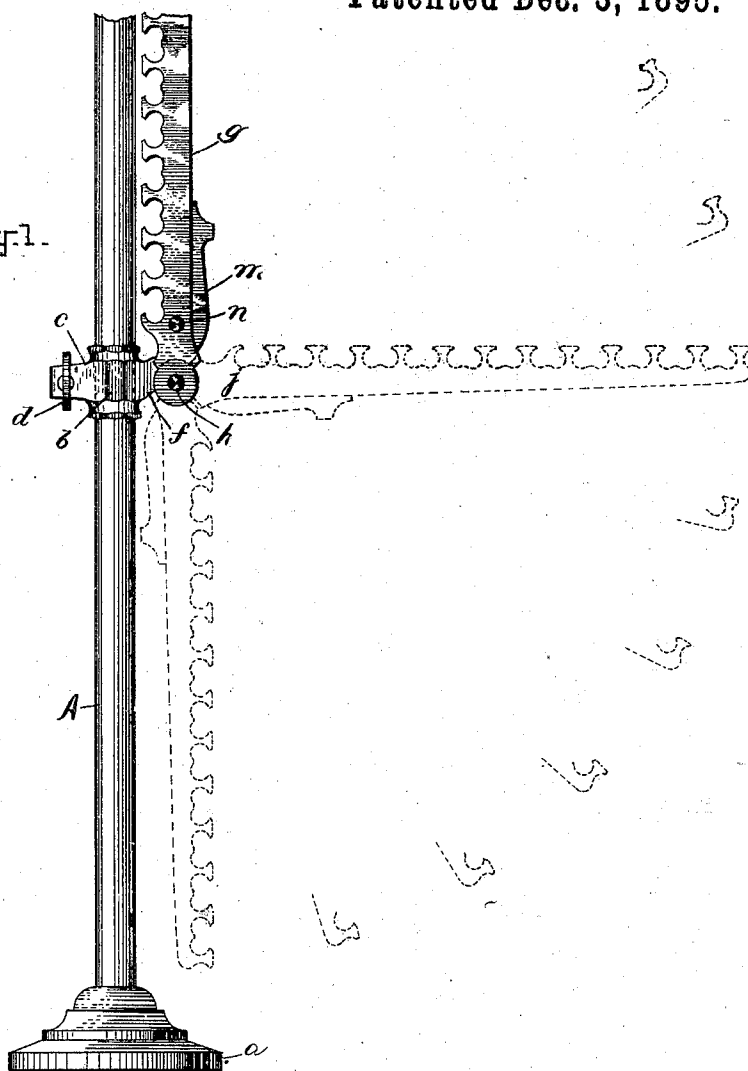


Fig. 2.

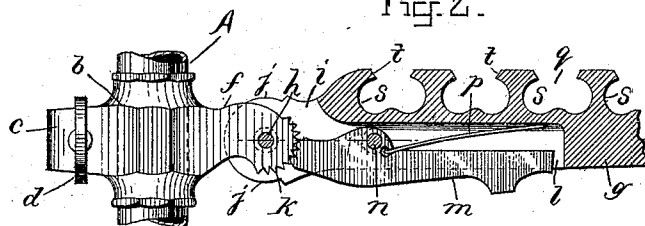
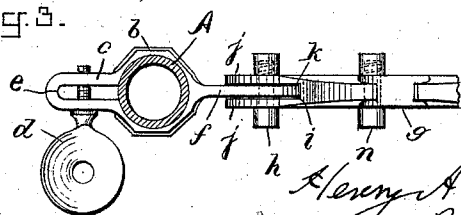


Fig. 3.



WITNESSES.

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EXHIBITION-STAND.

SPECIFICATION forming part of Letters Patent No. 550,779, dated December 3, 1895.

Application filed May 1, 1893. Serial No. 472,465. (No model.)

To all whom it may concern:

Be it known that I, HENRY A. BUCHHOLZ, a citizen of the United States, and a resident of New York city, in the county and State of New York, have invented new and useful Improvements in Exhibition-Stands, of which the following is a specification.

My invention relates to exhibition stands or brackets for displaying goods, having an arm or arms pivoted to a sleeve that is vertically adjustable on its supporting-standard, said arm or arms being adapted to be set at various different angles in a vertical plane to hold horizontal rods on which to place the goods; and it consists of an improved construction and arrangement of the pivot-joint connection with the sleeve and the means of adjusting and securing the arm in its different positions, all as hereinafter fully described, reference being made to the accompanying drawings, in which—

Figure 1 is a side elevation of my improved stand as made with one arm only, the arm being set upright, with dotted lines indicating various positions in which the arm may be set, and with the upper part of the standard and the arm broken off. Fig. 2 is a side elevation of the sleeve and part of the standard and a longitudinal section of the arm in a vertical plane on an enlarged scale; and Fig. 3 is a horizontal section of the standard and plan view of the sleeve and part of the arm, also on a larger scale than Fig. 1.

A represents the standard, preferably consisting of a round rod or tube, which is in this example provided with a base *a*, adapted to support it in an upright position; but it may be supported in any other approved way.

b represents a split sleeve fitted to the standard and having clamping-jaws *c* and a clamping-screw *d* to grip the standard for fixing the sleeve in different positions up or down along the standard. The clamping-jaws are made to abut each other at the outer extremities *e* only for more effectual grip of the standard by the sleeve through the stress of the clamping-screw located between the sleeve and the abutting point of the jaws.

The sleeve has a rigid arm *f* projecting from one side a short distance for the pivot-support of the display-rod-supporting arm *g*,

which is pivoted thereto at *h*, said arm *g* being slotted in the end, as at *i*, to receive the end of arm *f* between its ears *j*. The end of the sleeve-arm *f* terminates in a sector *k*, having ratchet-teeth. In the under side of the arm *g* is a deep groove *l*, extending from the slot *i* a suitable distance to form a suitable chamber, in which is a weighted pawl *m*, pivoted at *n* for securing the arm *g* in different positions and so as to be mostly concealed from view. This pawl has a series of ratchet-teeth like the teeth of the sector *k* for coacting with said sector, the pawl-teeth being below the right line bisecting the pivots *h* and *n* suitably for gripping the teeth of the ratchet by the overbalancing-weight of the long arm of the pawl, and also by the arm *g*, in addition to that of the pawl, for effective hold on the ratchet, and the relation of the long arm of the pawl to the arm *g* is such that by applying the hand to the pawl-arm, so as to grip it and the arm *g* together, will detach the pawl from the ratchet by the same action that is given to the arm *g* for shifting it, and when arm *g* is brought to the desired position releasing it also releases the pawl for locking again. The manipulation is therefore simpler than when different movements have to be given to the arm and the pawl. Besides the overbalancing-arm of the pawl tending to engage its teeth with the teeth of sector *j*, I have also provided a spring *p* for coacting therewith for greater certainty; but the gravitating pawl may be sufficiently reliable in some cases without the spring.

The object of the series of teeth in the end of the pawl is to enable teeth of finer pitch to be used for finer graduation of the arm *g*, which is frequently desirable to set the arm of one stand parallel with that of another stand and for other reasons, and at the same time to preserve the requisite strength in the teeth for which a single tooth of such fine pitch would not be sufficient.

It will now be seen that while the gravitation of the pawl and the action of the spring on it when used serve to engage the pawl with the sector automatically these forces, which would not alone have material effect to insure retention of the pawl-teeth under shocks and jars, are reinforced by the leverage of

the arm *g* with all the weight it supports, and thus the pawl is more effectually locked in the teeth of the sector according as the weight supported by the arm *g* is greater. This is the feature of my invention distinguishing it from other like exhibition-stands, in which the leverage of the arm rather tends to thrust the pawl out of engagement with the ratchet, so that they are unreliable, the arms being apt to fall through the effect of slight jars and shocks to which they are subject.

Another advantage of my device is the location of the pawl in the recess in the under side of the arm *g*, where it is mainly concealed from view, and where it is most effectually protected from thrusts liable to disconnect it. Besides being mainly concealed the pawl is in the most favorable location and condition for manipulation to release the arm when it is to be lowered, which is effected by pressing the part of the pawl projecting below the lower surface of the arm upward.

The concealment of the sector and pawl renders the apparatus more favorable to the view by hiding the appearance of mechanical apparatus.

The arm *g* has the usual notches *q* in the upper edge to receive the rods or bars on which the goods are to be hung, said notches being undercut in the end walls *s* suitably to hold the rods when the arm is inclined. I make the openings into these undercut notches with

bevel sides *t* flaring outward to facilitate inserting the bars.

I claim—

1. A fixed arm provided with a pivot, and having its end formed into a toothed sector, combined with the movable arm pivoted upon the fixed one, and having a recess formed in its inner end; and a gravitating pawl, the body of which is below a line drawn through the pivots of the pawl and arm, substantially as described.

2. A fixed arm having its free end to form a toothed sector, and provided with a pivot, combined with a movable arm pivoted upon the fixed one, and having a recess formed in its under side; and a gravitating pawl pivoted in said recess, the inner short end of the pawl being made to engage with the toothed sector of the fixed arm and the outer free end of the pawl being made to project below the lower surface of the movable arm so as to be readily operated by the hand, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 22d day of April, 1893.

HENRY A. BUCHHOLZ.

Witnesses:

W. J. MORGAN,
C. E. WHITNEY.