

(No Model.)

J. A. McDONALD.
DISPLAY BOX.

No. 541,111.

Patented June 18, 1895.

FIG. 1

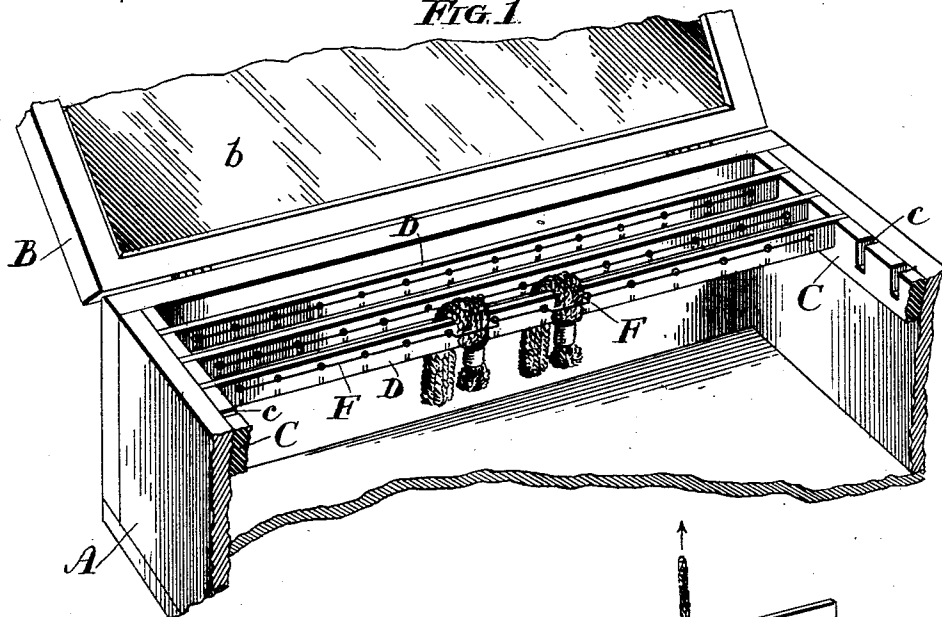


FIG. 2

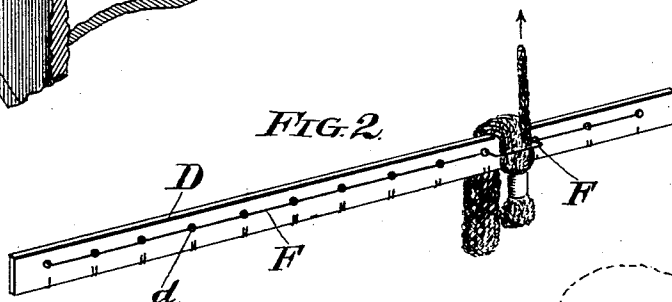


FIG. 3

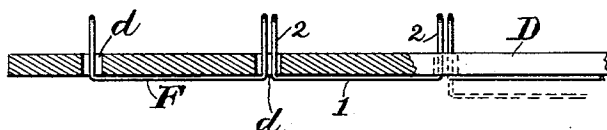


FIG. 4

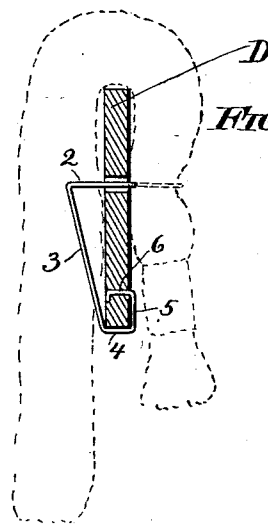


FIG. 5

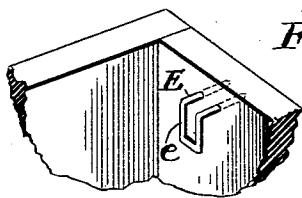
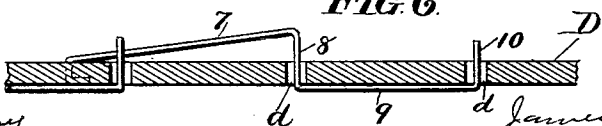


FIG. 6



Witnesses:
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UNITED STATES PATENT OFFICE.

JAMES A. McDONALD, OF CHICAGO, ILLINOIS.

DISPLAY-BOX.

SPECIFICATION forming part of Letters Patent No. 541,111, dated June 18, 1895.

Application filed December 5, 1894. Serial No. 530,906. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. McDONALD, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Display-Boxes, of which the following is a specification.

The principal object of the present invention is to provide for silk, yarn, and other goods done up in skeins, hanks and similar parcels, a display box of such construction that it will enable a complete inspection of all of the different shades or varieties of the goods displayed without the necessity for handling them.

Another object of the invention is to provide for goods of the character mentioned, a display box of such construction that the goods may, without being handled, be removed from the box and carried into a light that is better than that where the box is located, for the purpose of inspection.

To these ends the invention consists in the features of novelty that are particularly pointed out in the claims, and in order that it may be fully understood I will describe it with reference to the accompanying drawings which are made a part hereof, and in which—

Figure 1 is a perspective view of a display-box embodying the invention, portions being broken away and other portions omitted for the purpose of more clearly showing the construction of the several parts. Fig. 2 is a perspective view of one of the slats removed. Fig. 3 is a view showing one of said slats partly in plan and partly in section. Fig. 4 is a transverse section thereof. Figs. 5 and 6 are detail views showing modifications of some of the parts.

A represents a suitable box or case having preferably a hinged cover B provided with a pane of glass *b* for enabling the goods within it to be seen without opening it. Along two opposite sides of the box, and near the top, are arranged cleats C having at intervals vertical notches or recesses *c* which open upward and form sockets for receiving the ends of slats D, the notches of one cleat being exactly opposite the notches of the other cleat, so that the slats will be parallel with each other. I desire to have it understood that in its broadest aspect the present invention is not limited to this particular means for supporting

the slats, as there are others that will readily suggest themselves to those skilled in the art. For example a separate support may be used for each end of each slat as shown in Fig. 5. Here each of these separate supports consists of a staple E driven into the box and having a depending U-shaped portion *e* in which the end of the slat fits. The construction shown in Fig. 1 is preferred however, and these other constructions are suggested only to show that I do not regard the present invention as limited to a support of any particular construction. These slats are provided with means for holding the skeins or other parcels of goods, the box being of such depth that there will be beneath the holding means sufficient space for the depending ends of the parcels. The means for holding the several parcels in place upon the slats consist of a number of clamps F which are preferably constructed as shown more clearly in Figs. 2 and 3, but which may be of other construction. Each of the clamps as here shown is formed of a single piece of spring metal so bent that it has a portion 1 that spans the space between adjacent ones of a row of perforations *d* formed through the slat, bail like portions 2 proceeding from the extremities of the portion 1 and extending through the openings, portions 3 that form the springs of the clamp and proceed downward to the bottom of the slat, portions 4 that proceed beneath the slat, portions 5 that proceed upward a short distance on the opposite side of the slat and portions 6 that are driven into the slat and clinched to prevent withdrawal. The several portions bear such relations to each other that the tendency of the springs is to hold the portion 1 flat against the slat, and it is between this portion 1 and the slat that the skein or other parcel is clamped. Each clamp holds its parcel with sufficient firmness to prevent it, or any part of it, from falling out, and yet not with sufficient firmness to prevent the separate skeins or similar sub-parcels from being drawn out one at a time as desired.

The invention is not limited to a clamp of any particular construction further than that it must not have features that unfit it for use in clamping goods of the character above mentioned and I have shown in Fig. 6 a clamp consisting of a single piece of wire having one of its ends secured to the back of the slat and

bent to form a diverging portion 7 that forms the spring, a portion 8 that extends through one of the perforations *d*, a portion 9 that spans the space between the perforation aforesaid and the next one, and a portion 10 that projects through this latter perforation, and any other means for holding the parcels in place is within the scope of my invention. The clamp must, however, have a portion adapted to bear flat against the slat and other portions extending from the extremities of the portion first mentioned and proceeding toward the slat so as to prevent the goods from slipping out at the ends of the portion first aforesaid.

A display box constructed in accordance with any of the above descriptions or suggestions is particularly well adapted for displaying skein silk and the like, as it enables the complete and perfect inspection of a great number of shades or varieties of the goods without the necessity for even so much as opening the box, much less handling the goods. If the box happens to be located where the light is poor, any of the slats may be lifted out and carried to a better light, but still without any necessity for handling the goods or getting them tangled.

The principal feature of my present invention is the slat with its accompanying means for holding a number of parcels of goods and keeping them separate, and the character of the means for supporting this slat or any number of them may be varied without departing from the spirit and essence of this principal feature.

I am aware that it has been proposed to construct a rat-trap having a spring actuated choker made of a piece of wire bent into the form of three sides of a rectangle and having its parallel ends passed through perforations in a supporting block and I do not claim broadly a clamp of this description. It should be borne in mind, however, that the rat-trap having this single feature which bears some analogy to the spring clamp employed by me is not the equivalent of my invention, since the rat-trap of necessity has a trigger and other features so located that it is entirely unfitted for the use to which I have put the spring clamps forming a part of the subject matter of this application.

What I claim is—

1. In a device for displaying goods the com-

bination of a box, a number of slats supported therein in different vertical planes and at sufficient distances apart to leave between them spaces for the goods displayed, a number of spring clamps secured to each of said slats each of said clamps having a portion adapted to bear upon the slat and portions proceeding from the extremities of the portion first aforesaid and toward the slat, the clamps being located a sufficient distance above the bottom of the box to allow room for the depending portions of the parcels of goods displayed, substantially as set forth.

2. In a device for displaying goods the combination of a suitable support, a number of perforated slats supported thereby in different vertical planes and at sufficient distances apart to leave between them space for the goods displayed, a number of clamps carried by each slat each of said clamps having a straight portion 1 that spans the space between two of said perforations and is adapted to bear flat against the slat portions 2 proceeding directly from the extremities of the portion 1 and extending through and adapted to move endwise in said perforations, and spring portions proceeding from the portions 2 and secured to the slat, the spring portion being adapted to hold the portion 1 normally in contact with the slat and the portion 1 being located a sufficient distance above the bottom of the support to allow room for the depending portions of the goods, substantially as set forth.

3. In a device for displaying goods the combination of a suitable support, a number of slats supported thereby in different vertical planes and at such distances apart as to leave between them spaces for the goods displayed, a number of spring clamps secured to each of the slats each of said clamps being made of a single piece of metal having both of its ends secured to the slat and having an intermediate portion adapted to bear flat against the slat and portions proceeding from the extremities of the portion first aforesaid and toward the slat, clearance for the goods displayed being left above and below said intermediate portion substantially as set forth.

JAMES A. McDONALD.

Witnesses:

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