May 20, 1941. R. S. TROWBRIDGE 2,242,804

DISPLAY DEVICE

Filed April 15, 1939

Fig. 1.

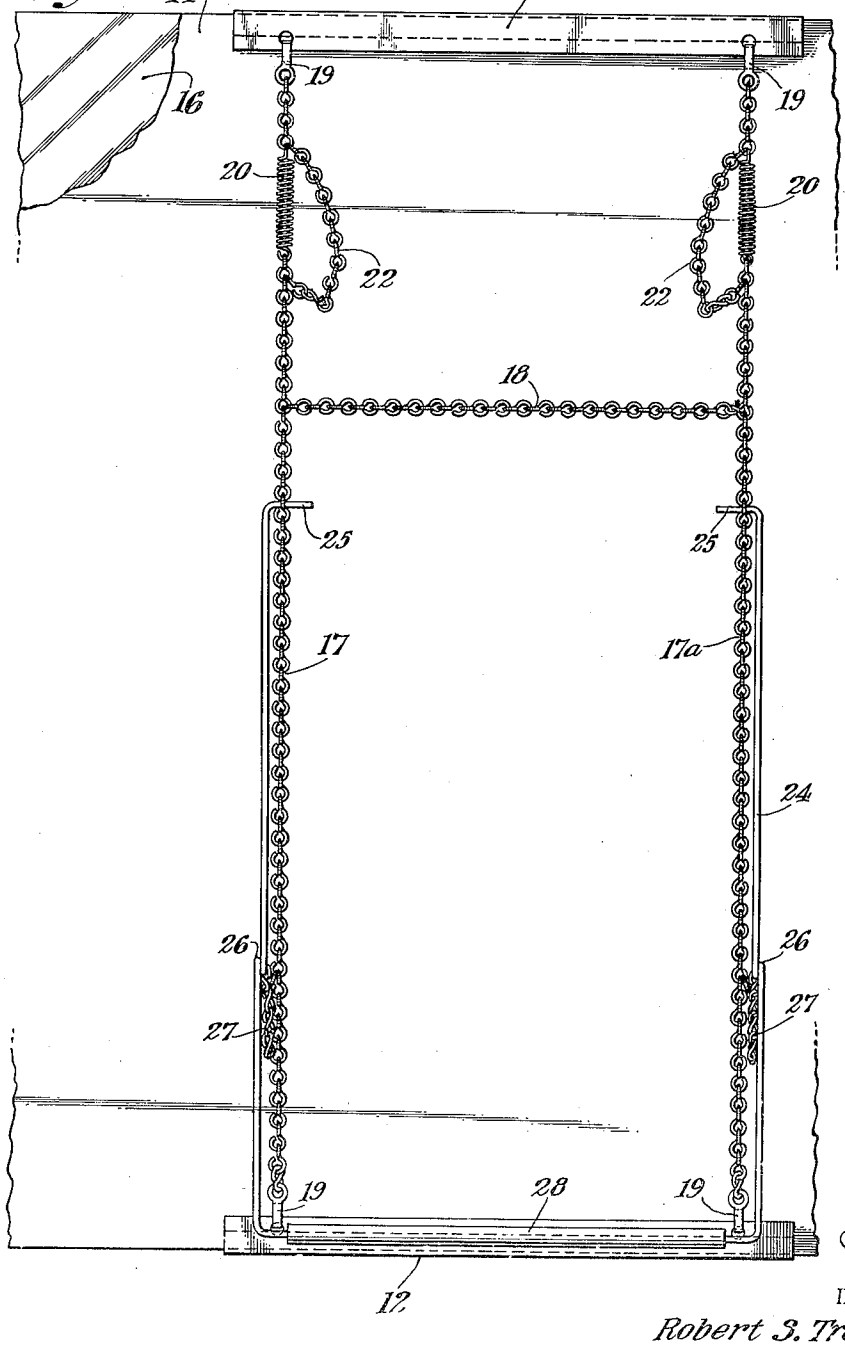
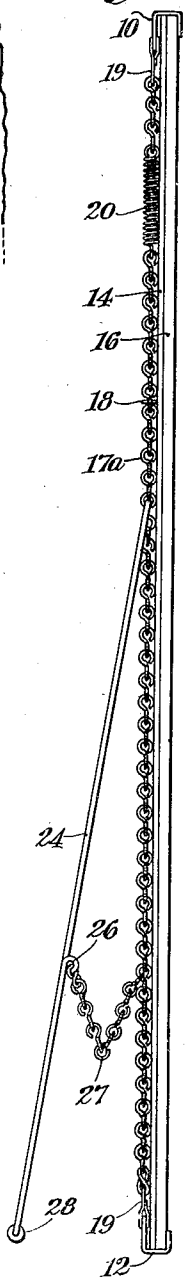


Fig. 2.



INVENTOR.

Robert S. Trowbridge

BY Nathaniel Ely

ATTORNEY.

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DISPLAY DEVICE

Robert S. Trowbridge, New York, N. Y.

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11 Claims. (Cl. 40—152.1)

This invention relates to improvements in display devices and more particularly relates to an improved form of adjustable frame for supporting pictures, plaques, etc.

One of the principal objects of my invention is to provide an inexpensive display device which readily lends itself to various sizes of pictures, etc., and which is automatically adjustable so that the supported member is readily engaged and firmly held.

A further object of the invention is to provide a normally flexible support for a picture frame or similar element, which is provided with resilient adjustment means initially integrated to prevent accidental loss, such support being rendered substantially inflexible by the element supported so that the supported element can be hung or otherwise elevated in a substantially inflexible manner.

A still further object of the invention is to provide an adjustable picture frame or similar device which is composed of the minimum of parts, each of which is inexpensive and commercially available so that a large stock of special elements is unnecessary and yet demands can be readily supplied without substantial inventory.

A still further object of the invention is to provide an easel structure for supporting a structure such as a picture, etc., in which the framework is entirely flexible, adjustable to firmly secure the desired picture, etc., and which is provided with an adjustable supporting leg which gives the desired rigidity when assembled.

Further objects and advantages of my invention will appear from the following disclosure of a preferred form of embodiment thereof, taken in connection with the attached drawing illustrative thereof, and in which:

Fig. 1 is a rear elevation of a supported member with the support attached thereto, and

Fig. 2 is an end elevation of the structure shown in Fig. 1.

As is well known, pictures, plaques, and other similar devices are commonly exhibited and displayed with temporary supporting devices and in such cases it is desirable and customary to use some means by which the pictures, etc., can be suspended from the wall or otherwise supported for exhibition. These pictures, etc., are, of course, of a variable size and it is usually necessary to provide some means of securing a glass to the picture to properly shield it. Heretofore, these temporary frames have been extremely complicated mechanical devices embodying elaborately machined parts, which are very costly.

In the preferred form of embodiment of my invention the display device consists essentially of three parts, of which the first part includes the upper and lower frame elements 10 and 12, each of which is preferably a polished metal channel member of the desired width to embrace the picture 14 and the glass 16, and of a suitable length as may be desired.

The second part comprises the channel connecting elements 17 and 17*a* which are preferably link chains. These chains are each longer than any probable picture to which the frame is to be secured. If desired, the chains may be interconnected near the top by cross chain 18. The chains are connected to the channel members by any suitable means such as the hook elements 19.

The third part of the combination is the take-up springs 20, of which there are as many as there are connecting elements 17. This take-up spring is adapted to be permanently secured on one end to a suitable link in the respective connecting chains, with its free end adapted to be hooked to a suitable link spaced from the fixed end such that the slack 22 makes the chain normally shorter than necessary for the desired spacing of the channel members 10 and 12.

It will thus be seen that the springs permit the necessary extension of the channel members 10 and 12 so that they will allow the channel members to be placed over the edges of a suitable picture and its glass and will resiliently hold the channel members onto the picture.

If the picture, etc. is to be stood up, it may be rested upon the channel member 12 with the assurance that the picture cannot buckle and that the glass will be held firmly against it. If, however, it is desired to support the frame of the picture from an elevated point, the entire device may be hung by the cross chain 18. The cross chain is preferably attached above the center of gravity of any picture which would fit within the frame. Furthermore, the cross chain is preferably attached below the spring take-up means so that the bottom channel member 12 is positively held and no suporting load is transmitted through the springs.

It will be appreciated that with very small frames a single chain can be used and similarly provided with a slack loop which might be used as a hanging support. It is also, of course, possible to use more than two chains, if necessary.

If an easel type structure is desired, it is possible to add a U-shaped supporting leg 24, the ends of which are preferably transversely bent as at 25. These ends can be projected through suitable eyes in the chain links, preferably below the

cross chain **18**. The natural resilience of the side arms of the U member **24** will keep the ends in place so that they will serve as pivots. If a permanent construction is desired, the ends **25** can be crimped in place.

Intermediate the ends of the side pieces, loops **26** may be conveniently formed for securing the limit chains **27**, the other ends of which are secured at suitable points to the longitudinal chains **17** and **17***a*. This will permit the desired extension of the easel leg to hold the picture in upright position. A rubber or other anti-slip cover **28** may be put on the bottom portion of the U-shaped easel leg.

With the easel structure, it will be apparent that I have provided the most simple elements for an effective picture support, and preferably this includes a bent wire and a plurality of chains which are not only inexpensive, but which can be compacted into a very small space. The rigidity of the picture is relied upon to hold the support and easel together, and then the chain is an inflexible anchor for the easel member **24**. The chains **17** and **17***a* may be considered the forelegs of the easel, and the detachable rear leg **24** and chains **27** complete the structure.

While I have shown and described a preferred form of embodiment of my invention, I am aware that other modifications may be made thereto and, therefore, desire a broad interpretation of my invention within the scope and spirit of the description herein and of the claims appended hereinafter.

I claim:

1. A securing device for framing an element, said device comprising spaced channel members of a width to engage both faces of the element, said channel members being relatively shallow and adapted to engage the edges of the element without extending substantially across either face thereof, flexible non-elastic means interconnecting said channel members and resilient take-up means secured across a slack portion of the flexible means, whereby the channel members may be resiliently spread to fit over the element to be framed and may be resiliently held in the framed position.

2. A securing device as claimed in claim 1, in which a flexible member interconnects the flexible means and serves as a hanger for the framed element.

3. A securing device as claimed in claim 1, in which said interconnecting flexible means is a chain.

4. A securing device as claimed in claim 1, in which said resilient take-up means is a spring.

5. A securing device as claimed in claim 1, in which said resilient take-up means is a spring, said spring being above a point of support, whereby the supporting load is positively carried from the point of support.

6. A securing device for framing an element which comprises a plurality of channel shaped frame members adapted to engage opposite edges of the element to be framed, a plurality of chains interconnecting said frame members, means interconnecting said chains to facilitate a hanging of said element, and springs interconnected in each of said chains to take up slack therein and to resiliently hold such channel shaped members against the element to be framed.

7. A securing device as claimed in claim 6, in which the chains, channel members and one end of each of the springs is integrally secured together to prevent loss, said springs being adjustable to facilitate assemblage of the channel members to elements to be framed within a predetermined range.

8. An easel having forelegs consisting of a plurality of flexible members, spacer channels interconnecting said flexible members, and a rear leg consisting of a bent wire member anchored to said flexible members at points vertically spaced from the bottom, said easel normally being completely flexible, said easel being rendered rigid when attached to a member to be supported.

9. An easel consisting of forelegs, rear leg and means to limit the spacing of the legs, said forelegs and spacing means being inflexible in the line of stress but entirely flexible when not stressed.

10. An easel as described in claim 9, in which the forelegs and spacing limit means are link chains.

11. A securing device as claimed in claim 1, in which an easel leg is secured to the flexible interconnecting means below the slack portion therein.

ROBERT S. TROWBRIDGE.