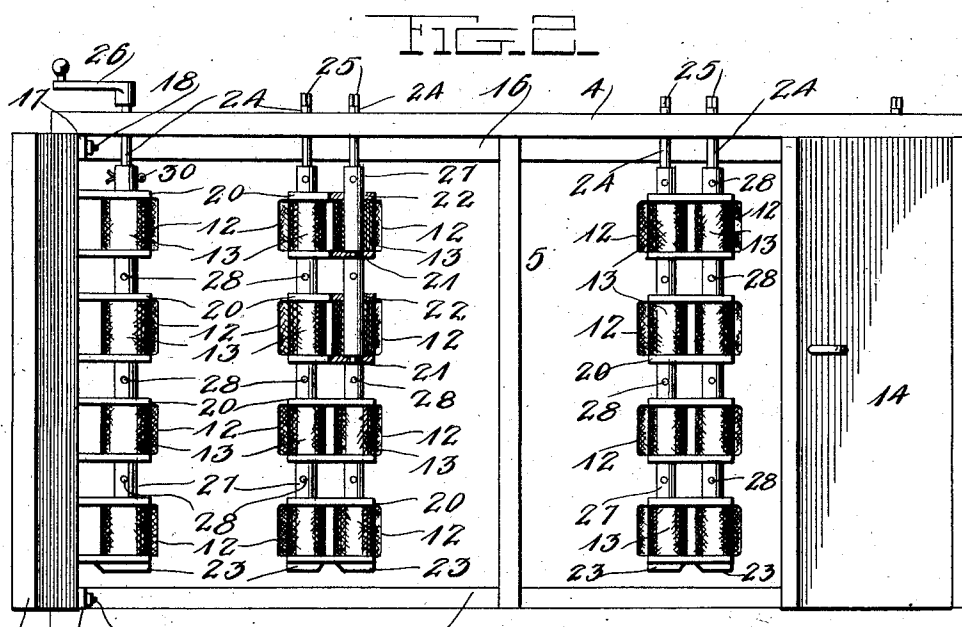
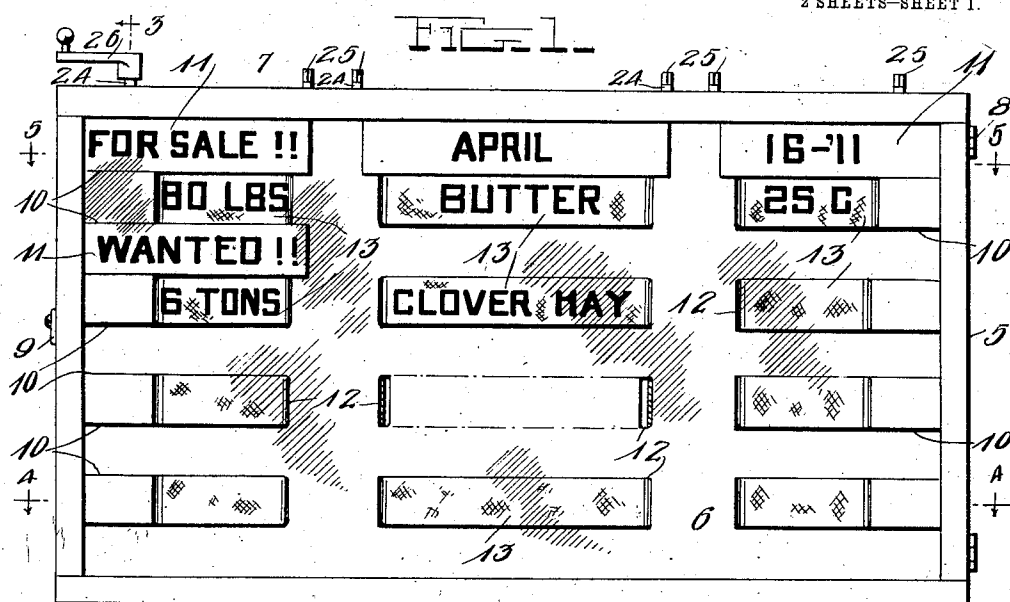


H., E. & A. MEHLHORN.
SIGN EXHIBITOR.
APPLICATION FILED MAY 11, 1911.

1,009,543.

Patented Nov. 21, 1911.

2 SHEETS—SHEET 1.



Witnesses
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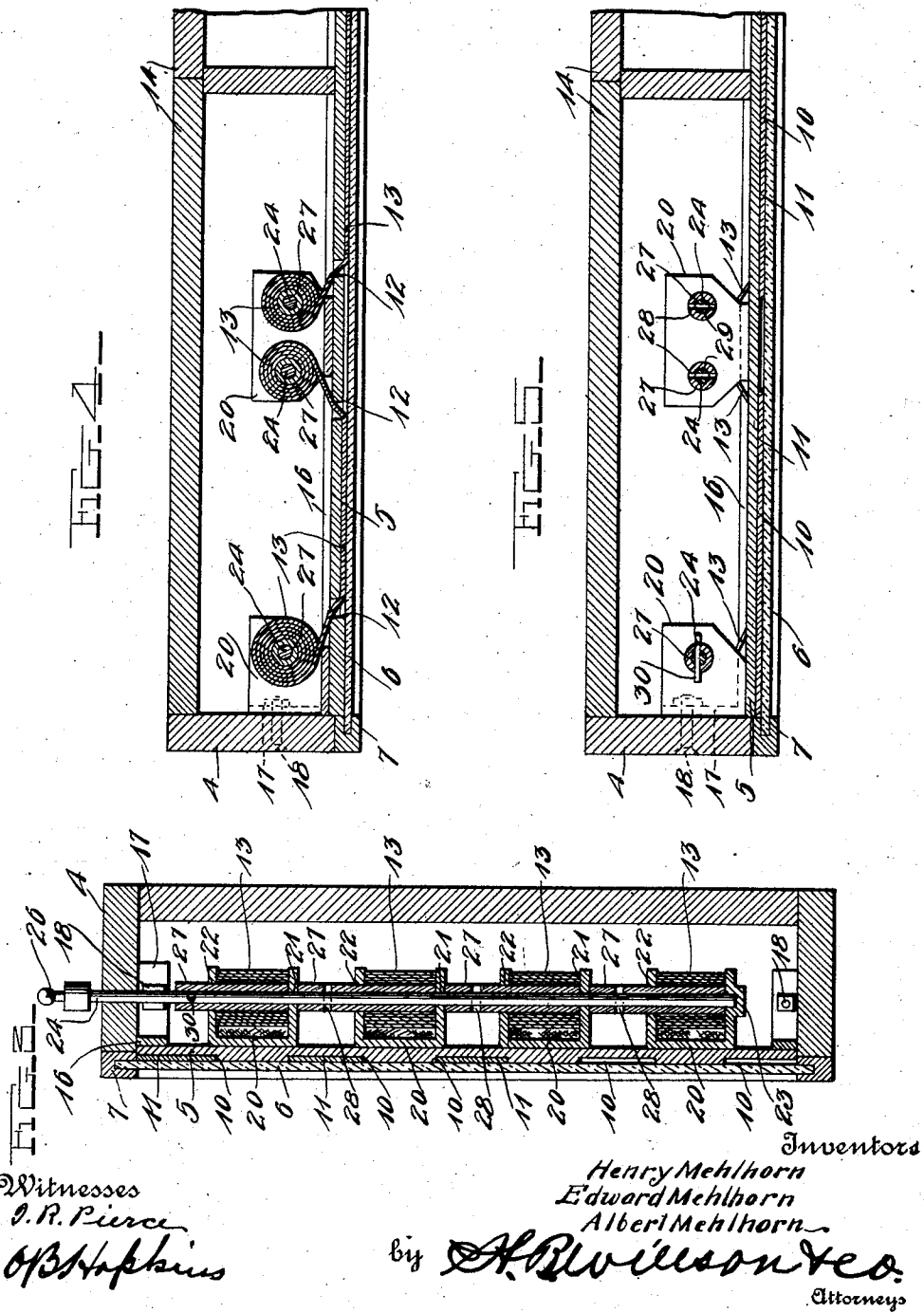
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UNITED STATES PATENT OFFICE.

HENRY MEHLHORN, EDWARD MEHLHORN, AND ALBERT MEHLHORN, OF HALFWAY, OREGON.

SIGN-EXHIBITOR.

1,009,543.

Specification of Letters Patent.

Patented Nov. 21, 1911.

Application filed May 11, 1911. Serial No. 626,405.

To all whom it may concern:

Be it known that we, HENRY MEHLHORN, EDWARD MEHLHORN, and ALBERT MEHLHORN, citizens of the United States, residing at Halfway, in the county of Baker and State of Oregon, have invented certain new and useful Improvements in Sign-Exhibitors; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to sign exhibitors, more particularly of that class employing a double reel and web; and the object of the same is to simplify the construction of the reels or spools upon which the webs are mounted, and to string them in series upon a shaft with means for connecting any one thereto so that the rotation of the shaft will turn the reel selected. These objects are carried out by the construction hereinafter more fully described and claimed, and as shown in the drawings wherein:—

Figure 1 is a front elevation of the invention partly in section; Fig. 2 is a rear elevation, parts being broken away and in section; Fig. 3 is a vertical section on line 3—3 of Fig. 1; Fig. 4 is a horizontal section on line 4—4 of Fig. 1; Fig. 5 is a similar view on line 5—5 of Fig. 1.

The casing of this improved sign comprises a frame 4 within whose front is removably mounted a face plate 5 of a shape and size sufficient to carry the sign which is to be exhibited, and by preference said face plate is covered by a sheet of glass 6 mounted within a frame 7 suitably hinged as at 8 to the face 5 or to one side of the frame 4, and buttoned as at 9 at its other edge thereto; although we do not limit ourselves to this construction. The front of the face plate 5 is provided with slides 10 in which may be removably inserted cards 11 bearing words as seen in Fig. 1, and between the guides are upright pairs of slots 12 through which pass webs 13 of fabric or other flexible

material carrying words or figures on their faces which are of course exposed between the slots and stand adjacent the words on the cards so as to build up a composite sign which may be changed by substituting other cards and by moving the webs in a manner well known in this art. The back of the casing is by preference closed by two hinged doors 14. In Fig. 4 of the drawings, the face plate of the casing is shown as connected with its frame work by strap irons 16 extending along the top and bottom of said face and secured behind it in a suitable way, and each iron has elbows or bends 17 at its extremities which pass inside the ends of the frame and are connected therewith by screws or bolts 18. So by opening the doors and removing these screws the entire face of this device can be withdrawn from the frame of the casing, as when either the frame or the face of the casing or the mechanism carried thereby is to be repaired. These details, however, are more matters of structure and preference than they are essential.

Coming now more particularly to the gist of the present invention, as best seen in Fig. 3, the numerals 20 designate brackets secured to the face plate of the casing and having through them alternately large and small holes 22 and 21, all arranged with their axes in upright alinement; and the lowermost bracket of the series has a step bearing 23. In this rests the lower extremity of an upright rod or shaft 24 which extends upward through the top of the casing and is squared at its upper end as at 25 for the reception of a crank handle 26 which is applied when the shaft is to be turned. Mounted loosely upon this shaft are a number of reels or spools 27 each of which has a bore that loosely fits upon the shaft, and each is of an external size to fit loosely within the larger hole 22 in the uppermost of the pair of brackets 20 and rest upon the lowermost of said pair around its smaller hole 21. The length of each reel or sleeve is sufficient to lead from the point where it rests upon the upper face of the

lowermost of a pair of brackets to and through the uppermost of said pair and rise somewhat above it, and in its upper end is a hole 28 which stands opposite a similar hole 29 through the shaft 24, so that at will a pin or cotter pin 30 may be inserted there-through. It is of course understood that there are two reels for each web, and each end of the web is wound upon one reel while its center moves across the face of the casing in a manner which is usual in sign exhibitors of this character. When it is desired to move one of the webs so as to expose a different word or figure at the face of the sign, the crank handle is placed upon the upper end of the proper shaft, the proper rear door opened, and a pin is inserted through a pair of registering holes in the shaft and the reel at that end of the web which it is desired to draw upon. Thereafter by turning the crank, the entire shaft rotates but only this reel is caused to revolve, and its web is wound thereon and unwound from the companion reel at the other end of the web. Thus it will be seen that each reel or sleeve or spool rests upon one bracket and extends upward through a larger bearing in the other, the small bearing in the lowermost bracket and the bore of the sleeve or reel forming a bearing for the shaft. The parts are so disposed that access may be had to the holes 28 for the insertion of the pin 30 into any of them from the back of the casing when one or both doors are opened. Herein we have spoken of these reels as "spools" in certain places, but it will be seen from the structure that we avoid the necessity for making heads at the extremities of the reels and they are therefore simply sleeves or tubes, the webs being guided around them by the adjacent faces of the brackets themselves.

It will not be necessary in this specification to go into details as to what may be printed or written upon the cards or webs, nor as to uses to which this invention can be put, because changeable exhibitors of this character are well known and are utilized in a variety of ways. As above suggested the gist of the present invention consists in the extremely simple manner in which we are able to mount a number of reels upon a single shaft, the former being simply pieces of pipe and the latter a round rod of a size to fit the bore of said pipes. Also we have a selective arrangement by which any certain reel may be rotated by turning the shaft, consisting merely in making registering perforations through the reel and the shaft and using ordinary pins of any preferred type. It might even be possible to lock the doors and remove the crank handle, and with the pins drawn out no one would be able to adjust the webs in either

direction by turning the upper ends of the shafts because said shafts are then not connected with the reels.

All parts are of the desired shapes, sizes, proportions and materials; and considerable change may be made in details without departing from the principle of our invention.

What is claimed as new is:

1. In a sign exhibitor, the combination with a frame having a glass face, doors at the back thereof, a face plate carrying certain sign elements and provided with upright pairs of slots, and means for detachably connecting said plate with the frame; of upright bearings in pairs carried by the rear face of said plate, spools mounted in said bearings, webs connecting the spools and passing out through said slots and across the front face of said plate, upright shafts extending through the top of the frame and downward through said pairs of bearings and through the spools between the members of such pairs, means for rotating said shafts at will, and means for selectively connecting any spool with the shaft upon which it is mounted.

2. In a sign exhibitor, the combination with an upright plate having slots therein disposed oppositely in pairs and those at each end of each pair arranged in vertical alinement, and bearings on the rear face of said plate arranged in pairs one above and one below each slot; of shafts passing through said bearings, means for rotating said shaft, a series of spools each disposed between a pair of said bearings and mounted loosely on a shaft, webs extending from one spool over the face plate to its companion spool, each spool being longer than the width of its web and having a hole in the portion projecting beyond the edge of the web, and connecting devices adapted to be passed through said holes whereby any spool may be locked to its shaft at will.

3. In a sign exhibitor, the combination with a casing including an upright face plate having slots therein disposed oppositely in pairs and those at each end of each pair arranged in vertical alinement, and bearings on the rear face of said plate arranged in pairs one above and one below each slot with a large hole through the upper bearing and a small hole through the lower one and all of the holes for each line of slots being in alinement; of a shaft passing through each upright series of holes and fitting rotatably in the smaller ones, a step bearing at its lower end, a crank at its upper end, and a series of spools each consisting of a tubular section resting upon a lower bracket and extending upward through the larger hole in the upper bracket and pierced with a transverse hole above the latter, its

bore loosely surrounding the shaft and the shaft being pierced with a hole adapted to register with that in the tubular section, a pin for entering the registering holes and
5 selectively connecting any spool with said shaft, and webs each extending from one spool over the face plate to its companion spool.

In testimony whereof we have hereunto

set our hands in presence of two subscribing 10 witnesses.

HENRY MEHLHORN.
EDWARD MEHLHORN.
ALBERT MEHLHORN.

Witnesses:

EGBERT COFFINBERRY,
FLOSSIE E. DUNN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."