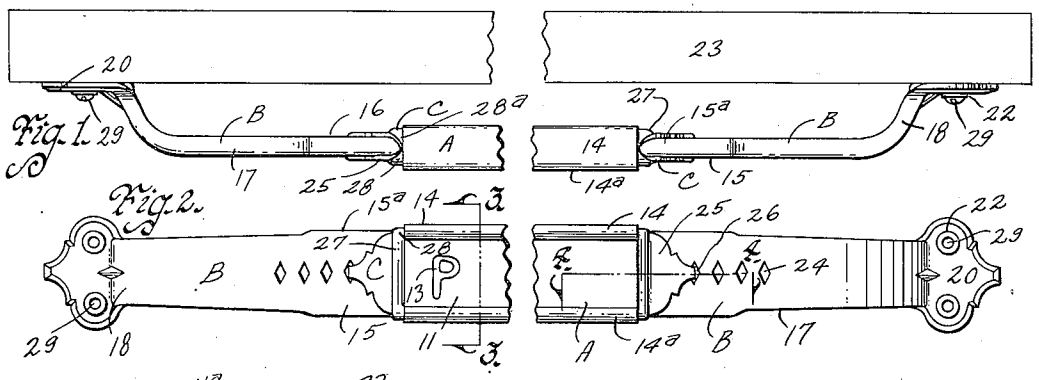
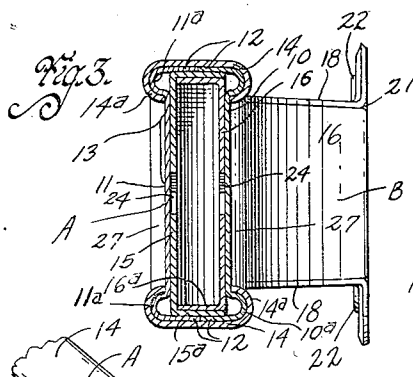
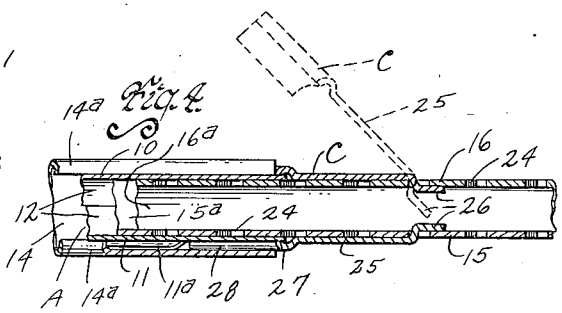
July 28, 1936. E. R. ERICKSON 2,048,735

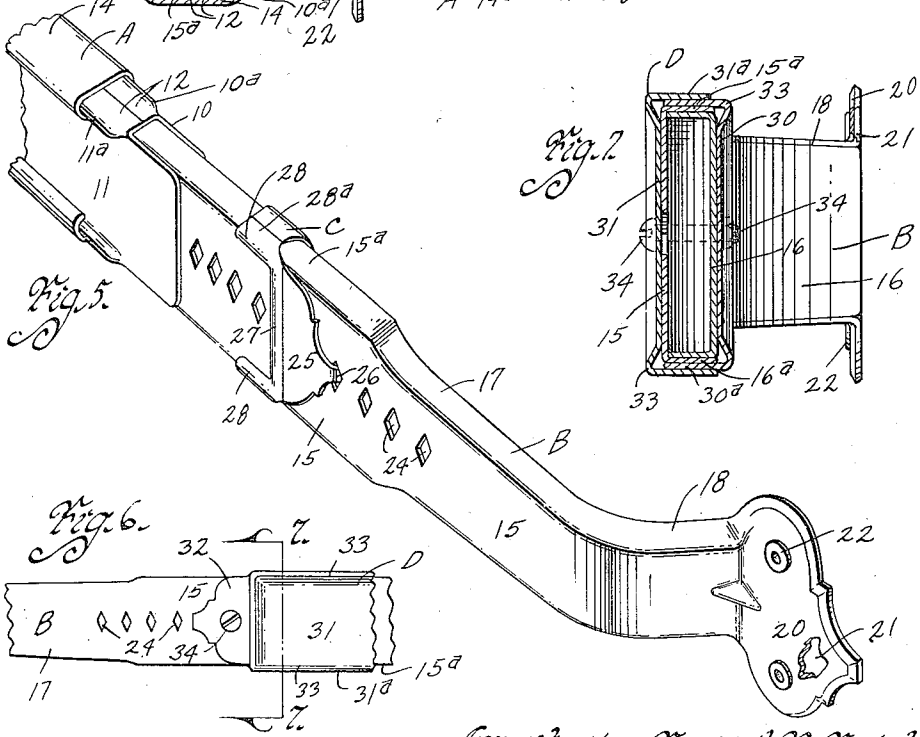
PUSH AND PULL BAR FOR DOORS

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PUSH AND PULL BAR FOR DOORS

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6 Claims. (Cl. 40—125)

The object of my invention is to provide a push and pull bar for doors, particularly intended for use on the doors of buildings to which the public has access, such as stores and shops.

It is an object of my invention to provide such a push and pull bar so constructed that it may be expanded or contracted for fitting it to doors of different widths.

Still a further purpose is to provide such a bar adapted to carry advertising attractively displayed.

Another purpose of my invention is to provide such a push bar made of parts having such construction that they can be readily produced by inexpensive die stamping methods and may then be readily and easily assembled.

An additional purpose is to construct such parts in such manner that those elements adapted to carry the advertising can be readily removed and others substituted therefor, whereas the parts not carrying the advertising may be made standard for all widths of doors and for use with different parts carrying advertising.

With these and other objects in view, my invention consists in the construction, arrangement and combination of the various parts of my push and pull bar for doors, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims and illustrated in the accompanying drawing, in which:

Figure 1 is a top or plan view of one form in which my invention may be embodied, parts being broken away.

Figure 2 is a front elevation of the push and pull bar illustrated in Figure 1.

Figure 3 is a vertical, detail, sectional view taken on the line 3—3 of Figure 2.

Figure 4 is a horizontal, detail, sectional view taken on the line 4—4 of Figure 2.

Figure 5 is a perspective view of my push and pull bar, parts being broken away.

Figure 6 is a front elevation of part of a modified form of device; and

Figure 7 is a vertical, sectional view taken on the line 7—7 of Figure 6.

For economy in manufacturing and for convenience in subsequent use, it is desirable that a push and pull bar of the kind under consideration should embody certain desirable features.

In the first place, it is desirable that the push bar be made in a standard construction, having parts capable of adjustment for adapting the push and pull bar to doors of different widths. This saves the necessity for carrying a large variety of sizes in stock and reduces the cost of manufacture by reducing the number of dies which may have to be made.

It is also desirable that such a bar should carry advertising and that the part carrying the advertising should be removable, so that another similar part carrying different advertising may be substituted. This is in order that the user may get the maximum advertising benefit out of his push and pull bar, and in order that he may change the advertising if that becomes desirable without the necessity for throwing away the door bar or without having to have it repainted or re-enameled.

These door bars are ordinarily made of metal and the advertising on the parts bearing it is quite frequently in the form of stampings or raised letters. Furthermore by making these parts carrying advertising interchangeable, it is possible to have factory production of such parts and to furnish them for interchange when that is desirable.

In the drawing, I show two forms of bars. The form illustrated in Figures 1, 2, 3, 4 and 5 has a central section A and end sections B, telescopically connected therewith with the section A.

The intermediate section A has an inner member 10 and an outer member 11. Each of these members consists of a narrow elongated strip of metal, having its side edges bent to form flanges 12 extended toward each other and terminating short of the ends of the strip.

The members 10 and 11 carry the advertising, which may be formed by stamping raised letters, one of which for purposes of illustration is illustrated at 13, and of course the whole outer face of each such strip may be enameled in one color with the letters in another color or colors to make an attractive advertising display. The members 10 and 11, when placed together with the edges of their flanges adjacent form a tubular box, substantially rectangular in cross section as perhaps best illustrated in Figure 3. The members 10 and 11 have ribs 10*a* and 11*a* adjacent their edges having the flanges, for decoration, reinforcement and for cooperation with the binder strips now to be described.

I provide edge binder strips 14 for each side edge of the so-called box. These binder strips are preferably made of brass or chromium plated metal, so as to give a better appearance to the completed device. They have the form of channel strips with their longitudinal edges curved around and in-turned toward each other, as indicated at 14*a* (Figure 3). These curved flanges 14*a* form channels to receive the ribs 10*a*—11*a*

for rigidly holding the parts of the central member together.

These binder strips 14 are slipped over the box-like device formed by the members 10 and 11 at the side edges thereof, as illustrated in Figure 3 and also in Figures 4 and 5.

At each end of the push and pull bar is an end member B. The member B is preferably made in two parts, to-wit the outer part 15 and the inner part 16. The parts 15 and 16 are channel-shaped and their respective widths are such that the flanges 16a of the members 16 will slip just inside the flanges 15a of the member 15 as shown in Figure 3.

The end members B are slightly reduced in width toward their free ends as indicated at 17 and are inclined away from the plane of the central member in what I may call a rearwardly direction as indicated at 18, and terminate in flat, outwardly projecting plate-like members 20 and 21. Thus, except at their extreme ends the members 15 and 16 form an elongated box-like member.

For convenience in assembly the finished device, the plates 20 and 21 may be riveted together as indicated at 22. This holds them rather loosely together and makes the assembling job easier.

I may also say that the members 15 and 16 and their flanges are so shaped that when the two members are placed together, their flanges 15a, 16a, preferably frictionally grip each other tight enough to hold the members together.

The end members B are telescopically slid into the central member as illustrated for instance in Figure 5.

The outer parts 15 and 16 of each end member preferably have a series of holes 24. The parts fit so snugly that when the end members are slid into the central member they frictionally engage, but in order to more securely lock the end members to the central member, I provide what might be called locking clips C, one for each end member.

Each locking clip comprises a flat plate-like part 25 with an offset finger 26 at one edge and with a rib 27 extending across the edge opposite the finger 26. At the ends of the rib 27, such rib is extended away from the plate 25 as indicated at 28, and each part 28 has a substantial flange 28a to fit over the side edge of the end member.

For locking the end members to the central member, these locking clips C are used. The offset tongue 26 is inserted through one of the holes 24. One of the clips is used on each side of each end member. The end member with the clip thereon is then forced telescopically into the central member. The rib portions 28 enter the channels at the edges of the members 14 and tightly frictionally engage the inner walls thereof. The flanges at the edges of the members 10 and 11 terminate short of the ends of said members to allow the entrance of the flanges 28a of the locking clips between the members 14 and the members 10 and 11.

By adjusting the locking clips to different holes 24, the overall length of the bar may be varied as desired.

Before describing the modified form, I shall refer to some of the advantages of a device of this general construction.

If the storekeeper using the push and pull door bar desires to change the advertising on the bar, he can remove the bar from the door. The bar is fastened to the door 23 by means of screws 29 (Fig. 1) extended through holes 29 in the rivets 22 and the plates 20 and 21. He can then pull out the end members and the locking clips and can readily remove the members 10 and 11 and substitute other members bearing different advertising. He may if he desires repaint the old plates 10 and 11 and replace them in the assembly.

By adjusting the locking clips C in different positions on the end members B by inserting the tongues 26 into different holes 24, the overall length of the bar may be readily adapted to fit any width of door upon which it is to be used.

The whole device can be very quickly and easily assembled or taken apart. Each of the parts is itself a simple construction.

It is noticeable that advertising copy can be placed on both sides of the central member A (on the elements 10 and 11) so that advertising matter can be seen from both sides,—that is by persons entering or leaving through the door.

In Figures 6 and 7, I have shown a modified form in which the end members B are the same as those already described. The locking clips C are omitted, and the central member indicated generally at D differs somewhat from the central member A.

In this modified form, the central member comprises the channel-shaped inner and outer elements 30 and 31. The parts are so formed that the flanges 30a of one of the elements, as the inner element 30, snugly fit between the flanges 31a of the outer element 31 as clearly indicated in Figure 7.

At each end of each member 30 and 31 is a projecting tongue or the like 32.

The members 30 and 31 may be supplied with longitudinal ribs 33 for reinforcing purposes.

The end members B are telescopically associated with the central member D and are fastened thereto by means of bolts 34 extended through suitable holes in the tongues 32 and selectively received in any of the holes 24 in the end members.

It will be observed that the second form of my door bar is substantially simpler than the first form described. Each form has certain advantages. In the second form, it is obvious that by removing the bolts 34, the ends may be taken out and either of the members 30 or 31 may be repainted or removed and a similar element substituted.

It is obvious from the foregoing that the essential features of my invention may be embodied in different forms of bars, and it is my purpose to cover by my claims any modifications in details or changes in the arrangement and construction of the parts, which may be reasonably included within the scope of my invention and of my claims.

I claim as my invention:

1. In a push and pull bar for doors, a central member having inner and outer strip-like elements provided with in-turned flanges at their side edges and with ribs adjacent said flanges, said elements forming a box-like structure, binder strips for receiving the side edges of the box-like structure and provided with channel-shaped portions for receiving said ribs, and end members telescopically associated with the central member.

2. In a push and pull bar for doors, a central member having inner and outer elements, each

comprising an elongated strip with in-turned flanges at its side edges and with ribs adjacent said flanges, said elements being assembled to form a box-like structure, binder strips for the side edges of the box-like structure, each comprising an elongated strip with channel-shaped portions at its edges to extend over a rib on each of the said elements for locking the elements together, and end members telescopically associated with the central member.

3. In a push and pull bar for doors, a central member having inner and outer elements, each comprising a strip with parallel flanges at its side edges and binder strips, comprising channel-like members receiving the side edges of the central member for holding them together, end members telescopically associated with the central member and locking clips adapted to be connected with the end members at different points in their length and to be frictionally locked to the central member.

4. In a push and pull bar for doors, a central member comprising parallel spaced elements, each having at its side edges flanges projected toward the other element, means for fastening said elements together to form a box-like structure, end members telescopically received in the ends of said structure, said end members being in the form of a substantially flat hollow tube with an offset end, and means for locking the end members into such structure in different positions of telescopic adjustment.

5. In a push and pull bar for doors, a central member having inner and outer elements, each comprising a substantially flat strip with parallel flanges at its side edges, the flanges of one element being abutted against the flanges of the other element, channel-like binder strips receiving the edges of said central member, having contracted longitudinal openings, end members telescopically received in the ends of said central member and members secured to the respective end members provided with projecting ribs adapted to be inserted into the ends of said binder strips for frictionally locking the binder strips, the central members and the end members together.

6. In a push and pull bar for doors, a central member, and members telescopically mounted with relation to the central member and a securing device on each end member detachably and adjustably connected therewith, said central member and said securing devices having coacting parts adapted to frictionally engage for holding the parts together.

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