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DOOR FRAME CONSTRUCTION

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6 Claims. (Cl. 189—46)

My invention relates to building construction and, more particularly, to a novel metal door case or door buck.

Heretofore in modern building constructions involving the use of a metal doorcase, the unit has been completely assembled, various parts welded together and shipped to the job as a unit. The doorcase, by reason of the way in which it is supported, after erection, has no severe strain placed upon the legs or side pieces thereof but in shipment the legs may easily be bent and the units either broken at the corners or distorted to such an extent that they will be practically useless on the job.

The present invention contemplates the elimination of these difficulties by the provision of a doorcase which is composed of a multiplicity of preshaped pieces which may be readily crated and shipped, and which may be assembled on the job with a minimum of labor.

A primary object of my invention is to provide a metal doorcase which may be shipped in a disassembled condition thus avoiding damage to the same during shipment and which may be cheaply and readily assembled on the job.

A more specific object of the invention is to provide a doorcase having separable legs and head together with means for detachably holding them in assembled position.

Other objects and advantages of my invention will be apparent from the following specification, claims, and from the drawing in which:

Fig. 1 is a front elevation of the preferred embodiment of my invention;

Fig. 2 is a vertical section taken on the line 2—2 of Fig. 1;

Fig. 3 is a vertical section taken on the line 3—3 of Fig. 2;

Fig. 4 is a vertical section taken on the line 4—4 of Fig. 2; and

Fig. 5 is a detail perspective view illustrating one corner of my doorcase construction.

Doorcases prior to their erection are exceedingly fragile due to the fact that the long legs can exert great leverage on the joints at which they are connected to the head which leverage these joints are not designed to withstand since, when properly in place, it is virtually impossible to exert upon the legs a force tending to produce such action. In shipping such doorcases it has therefore been necessary to crate them and as these crates are at least as large as the doorcase it is obvious that much space is wasted since the cases are in themselves nothing but a frame for a door.

The present invention eliminates the need for assembling the doorcases prior to their arrival at the building in which they are to be erected by the provision of three detachable parts (Fig. 1) a head 10, legs 11, and corner braces 13 (Fig. 2 et seq.) adapted to hold the head and legs together. The head 10 and legs 11 are each cut from the same metal shape, the shape being commonly known and commercially available, and formed with mitered ends. This shape is formed from a channel upon the web 11a of which is pressed a second channel 11b to form a door stop. The ends of the flanges 11c of the shape are bent inwardly as at 11d so that their inner faces co-operate with the web 11a and smaller channel shape 11b to form a track or guideway.

In order to connect the head 10 and legs 11 from within, as must be done to present a suitable and finished appearance, I provide the corner braces 13, each of which is a unitary structure composed of two flat angle pieces 14 and 15 welded as at 17 to flanges 16a on the opposite edges of the web of channel 16 bent at a right angle to conform to the angle pieces 14 and 15. The flat angles 14 and 15 and the channel 16 are so proportioned and sized that the flat angles fit closely between the flanges 11d and the web 11a of the head 10 and legs 11 and so that the bent channel 16 abuts a portion of the web 11a of these units. The corner braces 13 and the legs 11 may be bored as at 20 for the reception of a bolt and nut 19 whereby the brace and legs may be locked in position. The brace and the head 10 may be similarly connected or these two may be welded together.

Various modifications may be made in the above described embodiment of my invention without departing from the spirit and scope thereof as set forth in the following claims.

I claim as my invention:

1. A metal doorcase comprising a head, a pair of legs, said head and legs being similar in cross section, and means slidable only within the ends of said head and only within one end of each of said legs for positioning the legs at right angles with respect to said head and means passing through said head and legs for maintaining said last named means in place.

2. A metal doorcase comprising a head; a pair of legs; said head and legs being identical in cross section and shaped to provide upon their interiors oppositely disposed channels lying in parallel vertical planes; cornerpieces comprising two flat angles welded to a channel bent to form

a right angle, said channel lying in contact with portions of said head and said leg and each of said flat angles engaging one of the channels within said head and leg; a bolt passing through
5 said head and the channel of said cornerpiece; a bolt passing through said leg and said cornerpiece; and nuts on said bolts.

3. A metal doorcase comprising a head; a pair of legs; said head and legs being identical in
10 cross section and shaped to provide upon their interiors oppositely disposed channels; cornerpieces comprising two flat angles welded to a channel bent to form a right angle, said channel lying in contact with portions of said head
15 and said leg and each of said flat angles engaging one of the channels within said head and leg; and means for maintaining said cornerpieces in position within said head and legs.

4. A metal doorcase comprising a head; a
20 pair of legs; said head and legs being shaped to provide upon their interiors oppositely disposed

channels; cornerpieces comprising a connecting link, two flat angles welded to said connecting link, each of said flat angles engaging one of the channels within said head and leg; and means for maintaining said cornerpieces in po- 5
sition within said head and legs.

5. A metal doorcase comprising separable head and leg portions and corner pieces, said corner pieces conforming in shape to the inner side faces of said head and legs and slidable 10
into position therewithin, said corner pieces also providing a reinforcement along the ends of both said head and legs.

6. A metal doorcase comprising a head, a pair of legs, said head and legs being similar in cross- 15
section, and means slidable within the ends of said head and within one end of each of said legs and in contact with the inner surfaces only of the side walls thereof for connecting said head with said legs to form a unitary structure. 20

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