June 27, 1950 R. G. FERRIS 2,513,089

END STOP FOR TUBULAR BARN DOOR TRACKS

Filed July 1, 1948

Fig. 1.

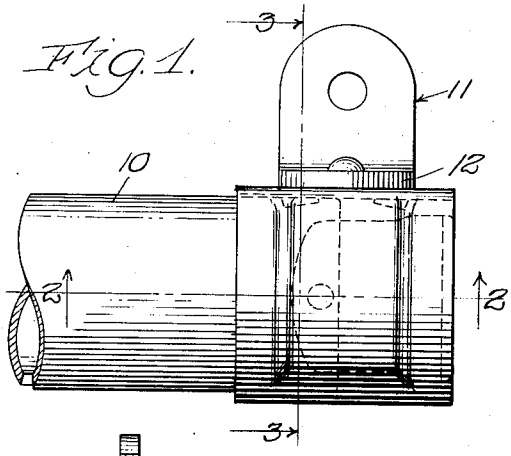


Fig. 2.

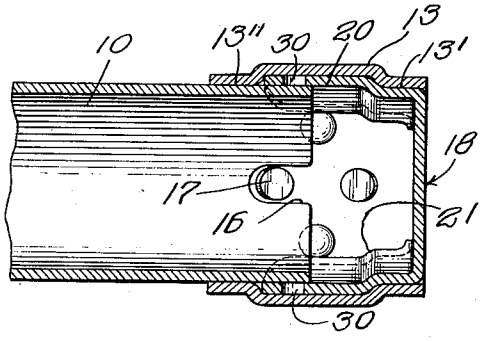


Fig. 3.

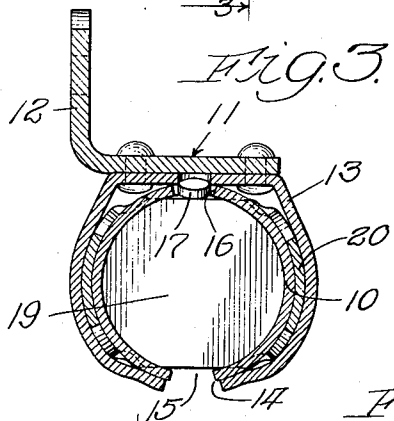


Fig. 4.

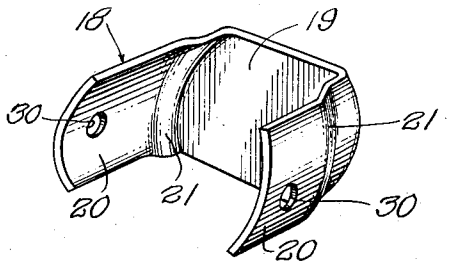


Fig. 5.

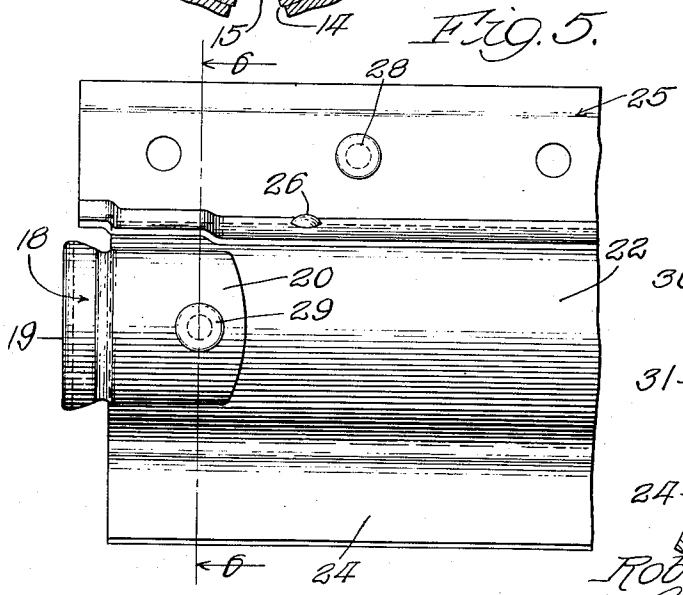
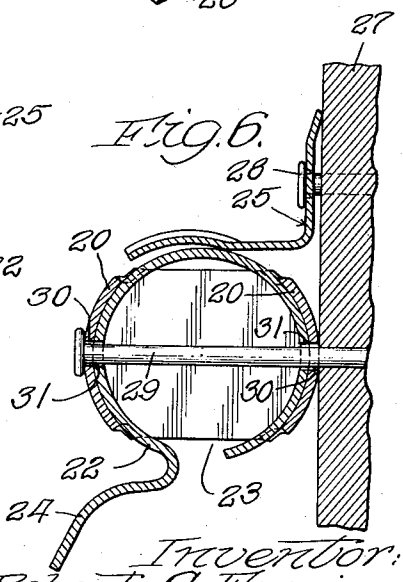


Fig. 6.



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UNITED STATES PATENT OFFICE

2,513,089

END STOP FOR TUBULAR BARN DOOR TRACKS

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Application July 1, 1948, Serial No. 36,518

6 Claims. (Cl. 16—94)

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More particularly the invention relates to an end stop for tubular tracks and which is adapted for use with different types of supporting brackets.

It is the general object of the invention to provide a new and improved end stop for tubular tracks.

Another object is to provide an end stop which is adapted for use with tubular tracks having a slot along the bottom to pass door hangers, both when such tracks have an apron along one side of the slot and when they do not have such an apron.

Other objects will become readily apparent from the following detailed description taken in connection with the accompanying drawings wherein:

Fig. 1 is a fragmentary side elevation of a tubular track together with its supporting bracket and a preferred form of the invention associated therewith;

Fig. 2 is a section taken approximately along the line 2—2 of Fig. 1;

Fig. 3 is a section along the line 3—3 of Fig. 1;

Fig. 4 is a perspective view of the preferred form of the invention;

Fig. 5 is a fragmentary elevational view of the preferred form of the invention associated with a barn door track having an apron along the hanger slot;

Fig. 6 is a section along the line 6—6 of Fig. 5.

While I have shown in the drawing and will hereinafter describe in detail a preferred embodiment of the invention, it is to be understood that various modifications may occur to those skilled in the art without departing from the spirit and scope of the appended claims.

As shown in Figs. 1 to 3, a tubular track section 10 is supported at one end thereof by a bracket 11. The bracket comprises an angle member 12 and a ribbed tubular member 13 the central rib of which provides an annular pocket, the angle member being suitable for attachment to a wall or the like by means of a vertical leg thereof. The tubular member has an internal diameter permitting the track to pass therethrough with a snug fit and has a slot 14 coinciding with the slot 15 in the track. To secure the track section against rotation and endwise movement in the bracket 11 the track section is provided with an end slot 16 adapted to interengage with a lug 17 which projects inwardly from the tubular member 13.

An end stop 18 is herein shown inserted in the tubular member 13 of the bracket and with a

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portion thereof extending between the tubular member 13 and the end of the track as shown in Fig. 2. The end stop 18 as shown is a member formed from a strip of sheet metal and is generally U-shaped, having an end portion 19 and a pair of curved leg portions 20. The end portion 19 is preferably flat as shown. The portions 20 are curved on a radius to correspond with the curvature of the tubular track section 10 and its supporting bracket 11. Adjacent the end portion 19 the leg portions 20 are offset outwardly at 21 so that the parts thereof immediately adjacent the end are of a reduced diameter fitting within the end portion 13' of the ribbed tubular member 13. This construction permits the end stop to be snapped into place in the supporting bracket by pressing the leg portions 20 toward each other as they are inserted into the end of the tubular member 13. As the end stop reaches the position shown in Fig. 2 the leg portions expand into the pocket formed by the rib portion of the member 13 as shown and permit the entry of the track section 10 and the interlocking thereof with the lug 17. Preferably, the leg portions 20 are sufficiently long so that the free ends thereof reach the reduced portions 13'' at the other side of the rib of the tubular member 13 and thereby clamp the end stop against endwise movement.

As shown in Figs. 5 and 6, the end stop 18 is used in connection with a tubular track section 22 of the type having a hanger slot 23 and a depending apron 24. This track section is supported by means of a bracket 25 which is secured thereto as by rivets 26 in a well-known manner. This form of track is also adapted for mounting on a vertical wall such as 27 and is herein shown as secured thereto by attaching device 28.

The end stop 18 may readily be secured to the track 22 as shown in Figs. 5 and 6 by slipping the leg portions 20 over the end of the tubular track section and then securing the end stop to the track section by means of a spike 29 which passes through coinciding apertures 30 and 31 in the end stop and track section and into the wall 27.

The end stop in the form herein illustrated is of extremely simple construction and includes portions 20 which are sufficiently resilient to permit it to be snapped into place when used with a supporting bracket of the type indicated at 11. It may also be used without alteration in connection with the form of track illustrated in Figs. 5 and 6. The advantage of an end stop adapted

for such universal use on different types of tracks is believed to be readily apparent.

I claim:

1. An end stop for tubular barn door tracks, comprising a U-shaped sheet metal member having an end portion and a pair of leg portions shaped to conform substantially with the surface of the tubular track, said leg portions being bent outwardly a short distance from the end plate so as to interengage in a ribbed track supporting bracket.

2. An end stop for tubular tracks having a ribbed track supporting bracket comprising a U-shaped sheet metal member having an end plate and a pair of leg portions shaped to conform substantially with the surface of the tubular track, said leg portions being offset outwardly a short distance from the end plate so as to interengage in said ribbed track supporting bracket.

3. In combination, a tubular barn door track, a bracket for said track having a supporting angle member adapted for attachment to a barn wall and a tubular track receiving member having a portion gripping said track and a portion providing an annular pocket partially surrounding the portion of the track adjacent the end thereof and extending beyond said end, and a U-shaped sheet metal end stop having outwardly offset legs which are engaged within said pocket and which extend over said portion of the track so as to be locked within said pocket by said portion of the track.

4. In combination, a tubular barn door track, a bracket for said track having a supporting angle member adapted for attachment to a barn wall and a tubular track receiving member having a portion gripping said track and a portion providing an annular pocket partially surrounding the portion of the tract adjacent the end thereof and extending beyond said end, and a sheet metal end stop having a pair of resilient leg portions shaped to conform substantially with

the tubular track, having outwardly offset sections which are snapped into the annular pocket in the bracket and extend over said portion of the track so as to be locked within said pocket by said portion of the track and so as to be locked against endwise motion by the margins of the pocket.

5. A combination of elements for use with a tubular barn door track, comprising, a supporting bracket for the track having a ribbed portion forming a circumferential pocket, and a U-shaped sheet metal member having an end plate and a pair of leg portions shaped to conform substantially with the tubular track, said leg portions short distance from the end of the plate and having said sections which are offset frictionally engaged within the pocket formed by the ribbed portion of said bracket.

6. A combination of elements for use with a tubular barn door track, comprising, a supporting bracket for the track having a ribbed portion forming a circumferential pocket, and a sheet metal member having an end plate and a pair of resilient leg portions shaped to conform substantially with the tubular track, said leg portions having outwardly offset sections a short distance from the end of the plate and having said offset sections snapped into the pocket formed by the ribbed portion of the bracket so that the resilience of said leg portions resists displacement of said member from said bracket.

ROBERT GAYE FERRIS.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
376,143	Cremer	Jan. 10, 1888
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Certificate of Correction

Patent No. 2,513,089 June 27, 1950

ROBERT GAYE FERRIS

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction as follows:

Column 4, line 1, before the word "having" insert *and*; line 14, after "portions" insert *having sections which are offset outwardly a*;

and that the said Letters Patent should be read as corrected above, so that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 10th day of October, A. D. 1950.

[SEAL]

THOMAS F. MURPHY,
Assistant Commissioner of Patents.