

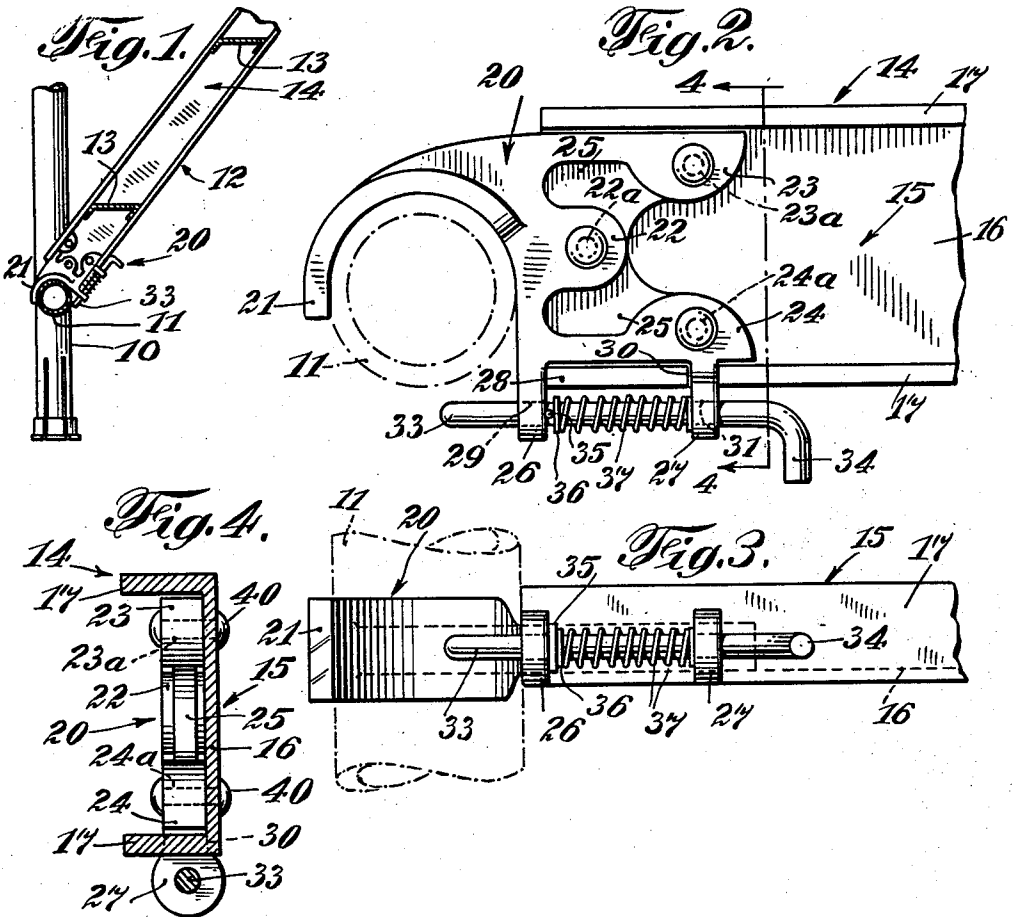
June 2, 1953

V. W. MENG

2,640,734

GOOSENECK CONNECTION

Filed Aug. 31, 1951



INVENTOR.
Victor W. Meng
BY
C. P. Gaepel
his ATTORNEY

UNITED STATES PATENT OFFICE

2,640,734

GOOSENECK CONNECTION

Victor W. Meng, New Hyde Park, N. Y., assignor
to The Patent Scaffolding Co., Inc., Long Island
City, N. Y., a corporation of New York

Application August 31, 1951, Serial No. 244,637

2 Claims. (Cl. 304—40)

1

This invention relates to gooseneck connections, and embodiments thereof are particularly applicable to connecting the ends of ladders to the horizontal tubing of sectional scaffolding consisting of end frames and braces to hold the end frames in spaced upright positions.

The invention consists in a hook shaped end to partially embrace and rest upon a horizontal tubing member, which hook shaped end is integrally part of a body portion having leg members, two in advance of the third member, adapted to be secured to the rail of a ladder, one of said leg members having extensions beyond the one side of the rail to support a spring actuated pin having a handle, with the free end of the pin extending below the hook sufficiently to capture the tubing at its lower portion, to prevent the hook from being displaced from the tubing. The improvement is generally pie shaped or in a plane to enable it to contact closely with the web of the rail.

The invention will be further described, an embodiment shown in the drawings, and the invention will be finally pointed out in the claims.

In the accompanying drawings,

Fig. 1 is a fragmental view of the lower part of an end frame having a horizontal tubing, and the ladder rail applied thereto, by means of the improvement;

Fig. 2 is a side view of the improvement;

Fig. 3 is a bottom view of Fig. 2; and,

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

Similar characters of reference indicate corresponding parts throughout the various views.

Referring to the drawings, the lower part of an upright 10 has the usual horizontal tubing 11. The known ladder 12 has horizontal steps 13 extending from rail to rail, not shown as known.

Each rail 14 of the ladder consists of a channel bar 15, having a web 16 and flanges 17 (Fig. 4). Into this channel is placed the improved gooseneck 20. It consists of a hook portion 21 preferably of curved shape, and integrally therewith, three legs 22, 23 and 24 extend rearwardly. Each of these legs has an opening 22a, 23a and 24a, for the passage of a connecting bolt. Webs 25 are disposed between the legs 22 and 23, and between 22 and 24, respectively for strengthening the structure. Depending from the lower leg 24 are two bracket like members 26 and 27. The member 26 extends in front of the end 28 of the rail 14, and has an opening 29.

The other member 27, extends through a cutout 30 in the lower flange 17 of the rail 14, which

2

cutout 30 extends the width of that flange, to enable the member 27 to be moved into proper position, when the improved structure is placed against the web 15 of the rail 14. The member 27 also has an opening 31. The openings 29 and 31 register longitudinally with each other. A pin 33 passes through both openings 29 and 31, and has a handle 34 in the form of a bent portion of the pin. The pin 33 has a stud 35 which normally is contiguous to the member 26, and collar 36 rests against the other side of the stud 35. A spring 37 surrounds the body portion of the pin 33, with one end pressing against the collar 36 and another end pressing against the member 27. By drawing the handle 34 rearwardly, the tip end of the pin is withdrawn, and the collar 36 compresses the spring 37. The withdrawal of the tip end of the pin 33 enables the hook 21 to be removed from the tubing 10. When the pull on the handle is released, the spring 37 moves the tip of the pin 33 back to its normal position.

The important feature of the improvement is to arrange the hook portion and the three legs with their webs into a vertical plane, so that they may be placed closely adjacent to the web 15 of the rail 14, as shown in Fig. 4. Bolts 40 preferably having their ends upset pass through the openings of the legs and secure them tightly against the web of the rail. The self-contained integral structure forms a strong connection for the end of a ladder when applied to a horizontal tubing of an upright.

I wish it to be understood that I do not desire to be limited to the exact details of construction shown and described, for obvious modifications will occur to a person skilled in the art.

I claim:

1. In a gooseneck connection, the combination of a hook portion to partially embrace a tubing of a sectional end frame, and a body portion including leg members having openings for bolts, adapted to secure the body portion to the end of a ladder rail, and a channel shaped rail of a ladder having a web, said body portion being in a plane parallel with and adjacent to the plane of the web, said rail having a cutout spaced from the end of the rail, and one of said leg members having pin guiding depending portions one of which abuts the end of the rail and the other of which passes through the cut out of the rail.

2. The structure of claim 1, in which said pin guiding depending portions have registering openings, a pin passing through said registering openings, said pin having a handle at one end and having its other end extending adjacent to

3

and below said tubing, and a spring between said pin guiding depending portions and surrounding said pin and holding said last named end in a position below said tubing to bar the movement of said tubing out of said hook portion, and adapted to be retracted by the movement of said handle moving said last named end from below said tubing to permit the movement of the tubing out of said hook portion.

VICTOR W. MENG. 10

4

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
840,636	Lillow -----	Jan. 8, 1907
966,346	Morton -----	Aug. 2, 1910
1,003,407	Abrams -----	Sept. 19, 1911
1,267,352	Baker -----	May 28, 1918
2,488,461	Wysocki -----	Nov. 15, 1949