

June 18, 1935.

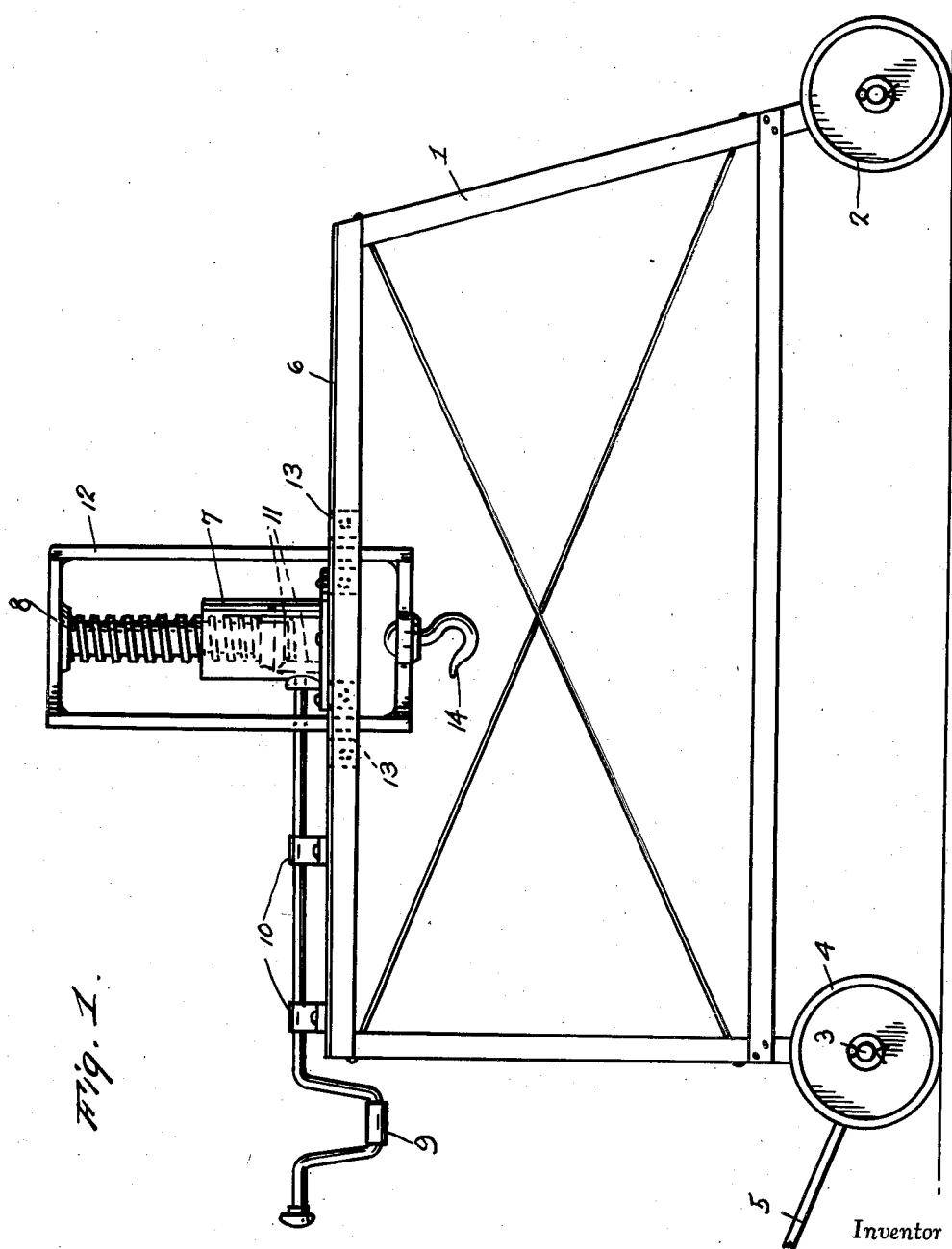
W. J. ROSS

2,005,050

PORTABLE HOIST

Filed Nov. 7, 1934

3 Sheets-Sheet 1



W. J. Ross

By *Clarence A. O'Brien*
Attorney

June 18, 1935.

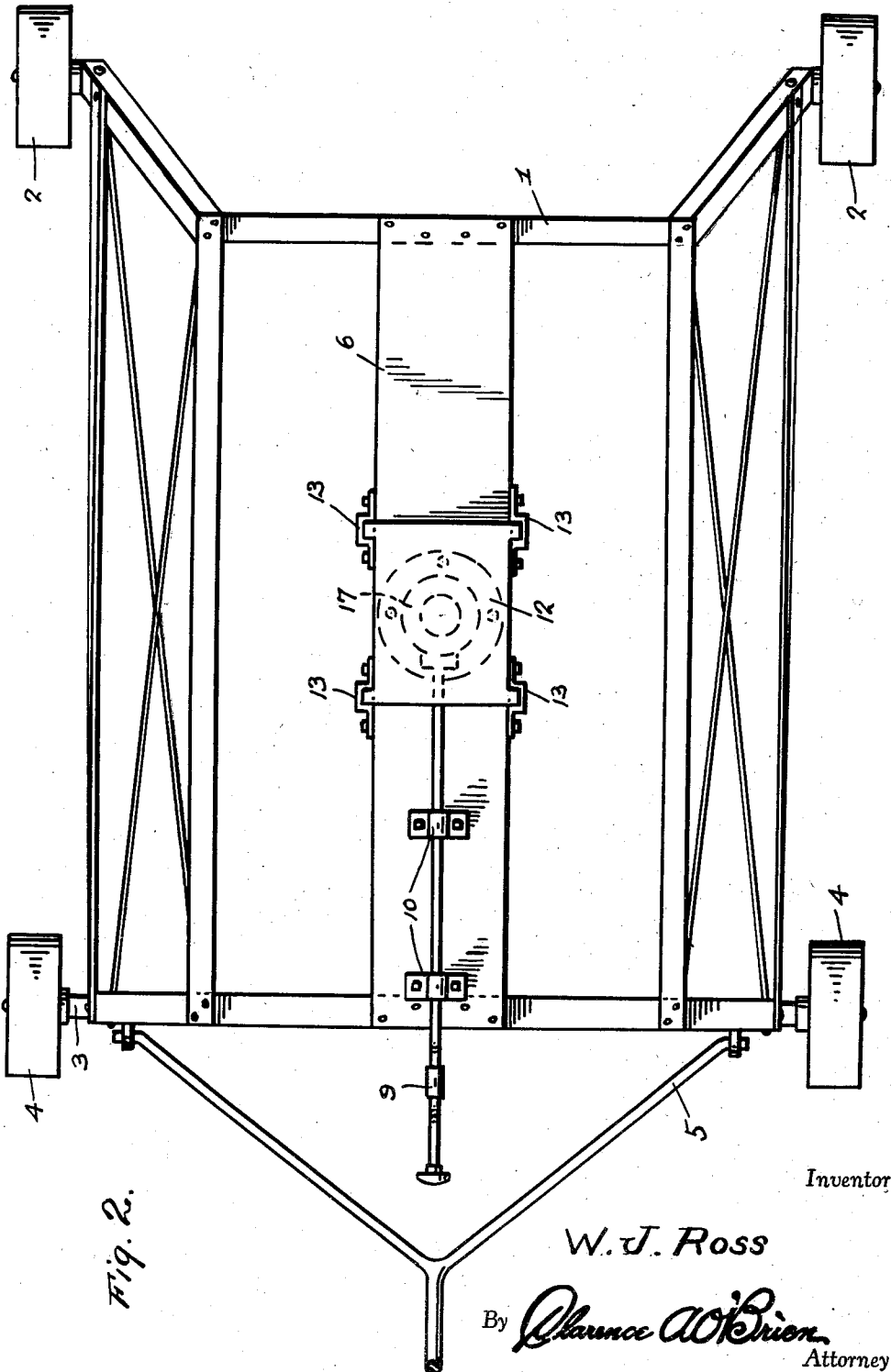
W. J. ROSS

2,005,050

PORTABLE HOIST

Filed Nov. 7, 1934

3 Sheets-Sheet 2



June 18, 1935.

W. J. ROSS

2,005,050

PORTABLE HOIST

Filed Nov. 7, 1934

3 Sheets-Sheet 3

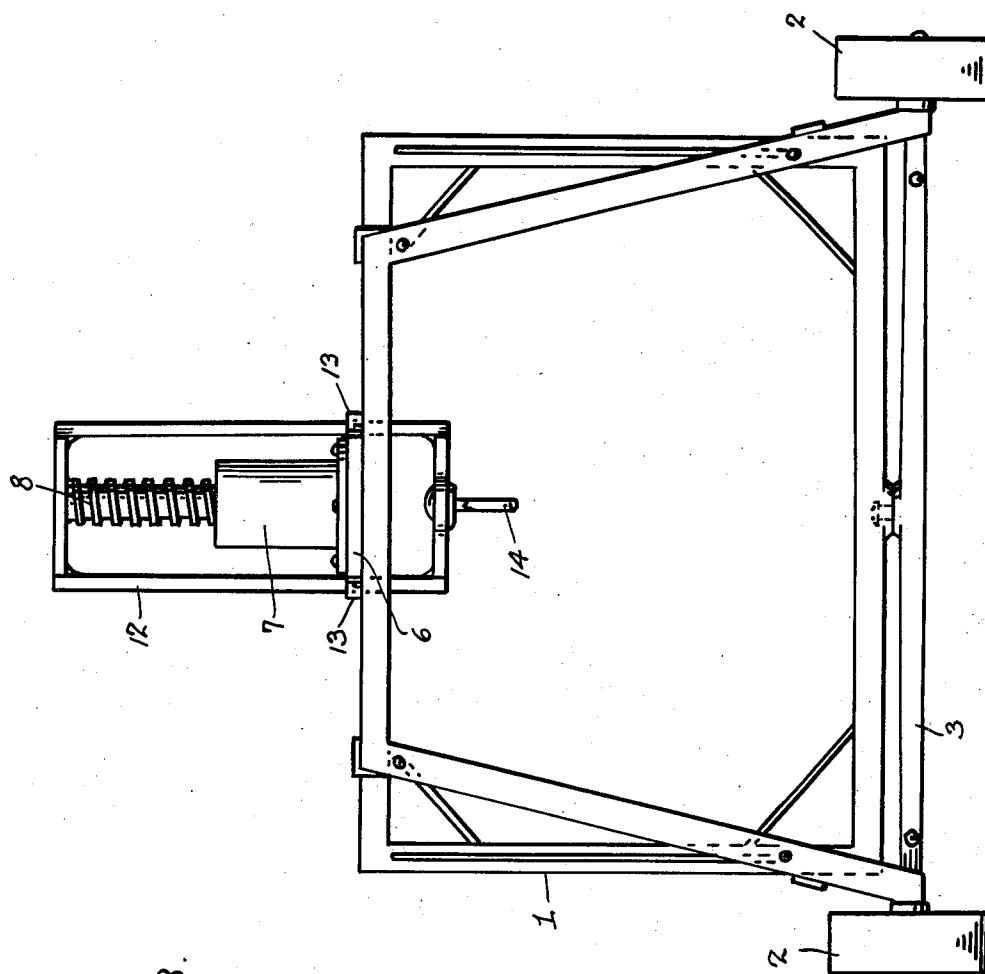


Fig. 3.

Inventor

W. J. Ross

By *Clarence A. O'Brien*
Attorney

UNITED STATES PATENT OFFICE

2,005,050

PORTABLE HOIST

William J. Ross, Tarrant, Ala.

Application November 7, 1934, Serial No. 751,895

1 Claim. (Cl. 254—7)

The present invention relates to new and useful improvements in portable hoists particularly for use in and around industrial plants and shops and has for its primary object to facilitate the lifting and movement from place to place of heavy objects, such as motors, gears, shafts, etc.

Another very important object of the invention is to provide a hoist of the aforementioned character which comprises a novel construction and arrangement of jack for lifting the work.

Other objects of the invention are to provide a portable hoist which will be comparatively simple in construction, strong, durable, highly efficient and reliable in use, compact, light in weight and which may be manufactured at low cost.

All of the foregoing and still further objects and advantages of the invention will become apparent from a study of the following specification, taken in connection with the accompanying drawings wherein like characters of reference designate corresponding parts throughout the several views, and wherein:

Figure 1 is a view in side elevation of a portable hoist constructed in accordance with the present invention.

Figure 2 is a view in top plan thereof.

Figure 3 is a view in rear elevation of the invention.

Referring now to the drawings in detail, it will be seen that the embodiment of the invention which has been illustrated comprises a supporting frame 1 on the rear end of which wheels 2 are journaled. Mounted for swinging movement beneath the forward end of the frame 1 is an axle 3 (see Figure 3) on which the front wheels 4 are journaled. The reference numeral 5 designates a suitable tongue which is connected to the axle 3.

Mounted longitudinally on top of the frame 1 is a metallic beam 6. Rigidly secured to the beam 6 and rising therefrom is a screw jack 7, the screw 8 of which is actuated by a hand crank 9 which is journaled in bearings 10 on beam 6. It will be noted that the hand crank 9 extends beyond the forward end of the frame 1 for convenient operation. Bevelled gears 11 operatively connect the hand crank 9 to the screw 8 of the jack 7 in the usual manner.

Mounted on the upper end of the screw 8 of the jack 7 is a metallic hoisting frame 12 which slidably encircles the beam 6. It will be noted that the jack 7 is disposed within the hoisting frame 12. The hoisting frame 12 travels vertically in guides 13 on the longitudinal edges of the beam 6. Depending from the lower end of the hoisting frame 12 is a hook 14. A chain (not shown) or any other suitable means may be employed for connecting the hook 14 to the work.

It is thought that the manner of using the hoist will be readily apparent. The frame 1 is moved on the supporting wheels 2 and 4 to a position over the work. As illustrated in advance in Figure 2 of the drawings, the rear end of the supporting frame 1 is open to facilitate positioning said frame over the work. The hand crank 9 is then actuated in a direction to lower the screw jack 7, after which the work to be lifted is connected to the hook 14. The jack 7 is then actuated to elevate the frame 12 with the work suspended therefrom after which the work may be moved to the desired location and lowered with a minimum effort.

It is believed that the many advantages of a portable hoist constructed in accordance with the present invention will be readily understood and although a preferred embodiment of the invention is as illustrated and described, it is to be understood that changes in the details of the construction and in the combination and arrangement of parts may be resorted to which will fall within the scope of the invention as claimed.

What is claimed is:

A portable hoist comprising a wheeled supporting structure including a horizontal beam, guides mounted on the sides of said beam, a vertically movable hoisting frame slidably mounted on the beam and operable in the guides, said beam extending through said hoisting frame, a screw jack mounted on the beam and rising therefrom within the hoisting frame, said screw jack being operatively connected to the hoisting frame for actuating the latter, means for connecting the hoisting frame to the work and a hand crank rotatably mounted on the beam and operatively connected to the screw jack for actuating said screw jack.

WILLIAM J. ROSS.