

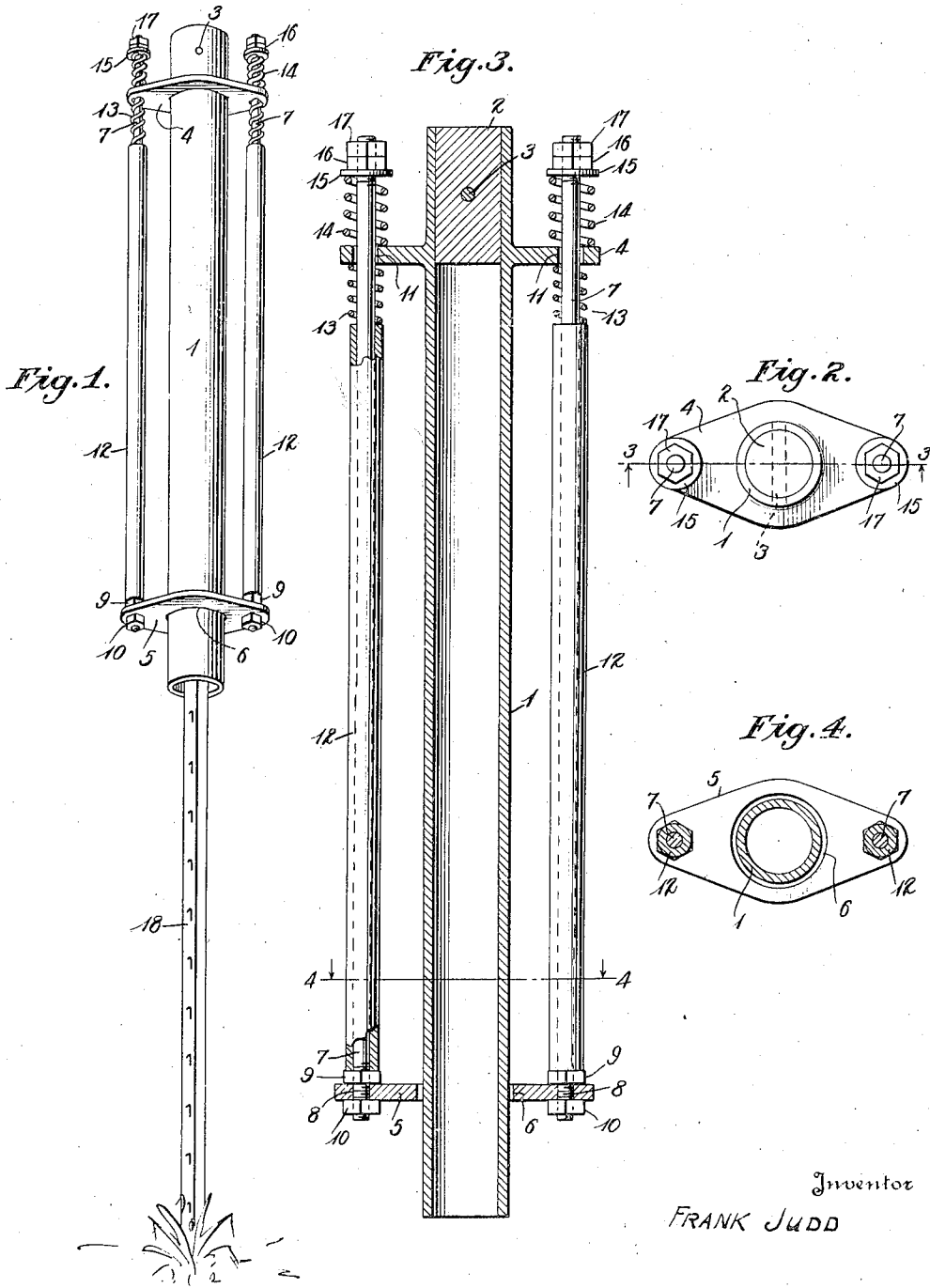
May 24, 1932.

F. JUDD

1,859,398

POST DRIVER

Filed May 26, 1930



Inventor
FRANK JUDD

334

Knight Bros.

Attorneys

UNITED STATES PATENT OFFICE

FRANK JUDD, OF SAC CITY, IOWA, ASSIGNOR TO E. S. GAYNOR LUMBER COMPANY, OF
SIOUX CITY, IOWA, A CORPORATION OF IOWA

POST DRIVER

Application filed May 26, 1930. Serial No. 455,918.

This invention relates to an improved post driver.

An object of this invention is to provide a post driver that is efficient in its action and which is easily operated.

Another object is to produce a structure that shall avoid the transmission of the shock of the blow to the hands of the operator.

A further object is to so arrange the various parts of the post driver so that it shall be reinforced at certain desired points.

Other objects of my present invention will be apparent to those skilled in the art from the following description and appended claims.

In the drawings accompanying the description,

Fig. 1 is a perspective view of my post driver in operative position on a post,

Fig. 2 is a top view of the post driver,

Fig. 3 is a vertical section taken along line 3—3 of Fig. 2,

Fig. 4 is a section taken along line 4—4 of Fig. 3.

The driver consists of a guide tube 1 provided with a driving weight 2 closing its upper end. The weight 2 is fastened in place by a rivet 3. On the outer side of the tube 1 adjacent the lower end of the weight 2 an upper plate 4 is securely welded. The plate 4 in addition to its other functions described below serves to reinforce the tube 1 at this point. It is at this point that the tube 1 is subjected to the greatest strain. A lower plate 5 is provided which is of substantially the same size and shape as plate 4. Plate 5 however is provided with a central hole 6 which is larger than the tube 1 and thereby said plate 5 can slide freely over the tube 1.

Two side ends 7 are threaded at each end. The lower ends of these rods are screwed into two topped holes 8 in plate 5. Two nuts 9 and 10 serve to lock end rod 7 against movement relative to plate 5. Plate 4 is provided with two holes opposite the holes 8 of plate 3. These holes 11 are large enough to permit the ends of rods 7 to move freely through them. A tube 12 is placed over each rod 7. Between the upper end of each tube 12 and the plate 4, a spring 13 is provided. A sec-

ond spring 14 is placed over the upper end of each rod 7 and bears against the upper surface of plate 4. Each spring 14 is held in place by a washer 15 held in place by a nut 16 and a lock nut 17 threaded onto the upper end of rod 7.

To use the driver, the open end of tube 1 is placed over a post 18 to be driven as indicated in Fig. 1. The operator then grasps the tubes or handles 8 near the bottom, raises the driver to the desired height and brings it down on the post. This operation is repeated until the post is driven into place.

By having the handles parallel to the axis of the tube and extending close to the bottom thereof the driver is easily operated from the ground. The springs 13 and 14 serve to remove the greater part of the shock due to the impact of the weight with the top of the post. Also upon the jumping of the weight after the initial blow the weight is guided to strike the top of the post a second time.

Various changes may be made in this embodiment of my invention as will be apparent to those skilled in the art within the scope of the appended claims.

Having thus described my invention, I claim:

1. A post driver comprising a guide tube, a weight in the upper end of said tube, a plate secured to the outside of said tube at one end thereof, operating handles resiliently connected to said plate, a second plate rigidly connected to said operating handles, the opposite end of said tube passing through said second plate.

2. A post driver comprising a guide tube, a weight in the upper end of said guide tube, a plate secured to the outside of said guide tube at one end thereof, said plate being provided with holes, a plurality of operating handles, one end of each of said handles passing freely through said holes, a shoulder on each of said handles both above and below said plate, a spring interposed between each of said shoulders and said plate, and means rigidly connecting the opposite ends of said handles.

3. A post driver comprising a guide tube, a weight in the upper end of said guide tube,

a plate integral with said guide tube on the outside of said tube immediately adjacent the lower end of said weight and operating handles resiliently connected to said plate.

- 6 4. A post driver comprising a guide tube, a weight in the upper end of said tube, lateral extensions upon said tube at said upper end, long operating handles parallel with said tube passing through said extensions, 10 resilient connections between said extensions and the upper part of said handles, and means for slidably connecting the lower part of said handles with said tube.

The foregoing specification signed at Sac City, Iowa, this 17th day of May, 1930.

FRANK JUDD.

20

25

30

35

40

45

50

55

60

65