Feb. 22, 1949. C. J. GREGORY 2,462,486

DEVICE FOR TREATING TIMBER

Filed July 29, 1947

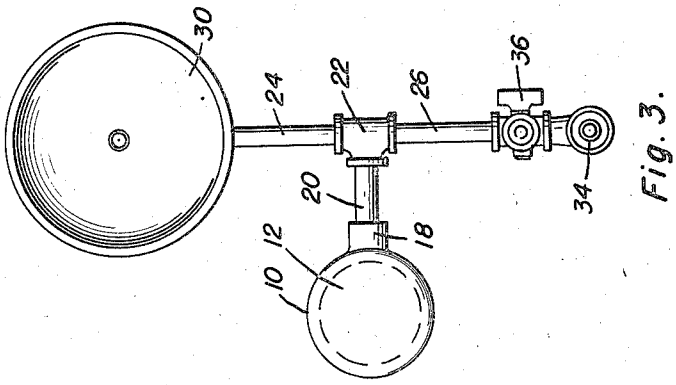


Fig. 3.

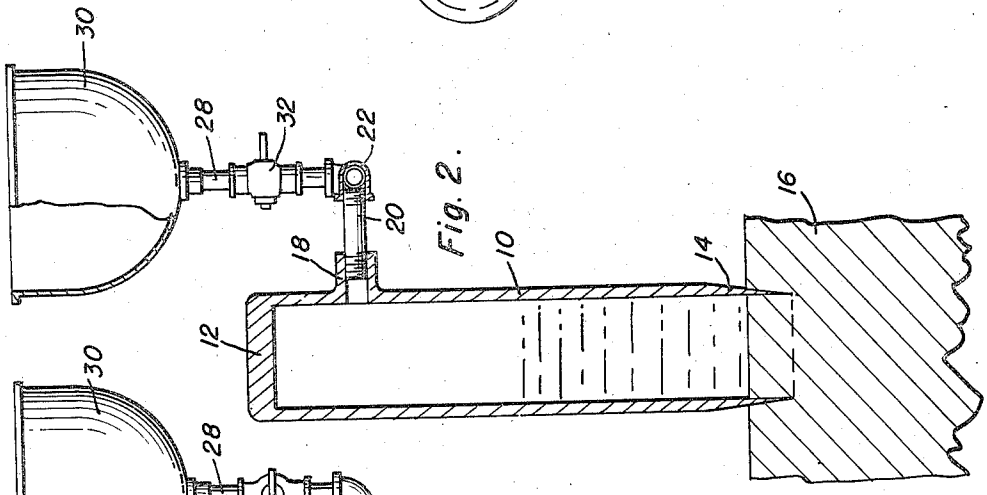


Fig. 2.

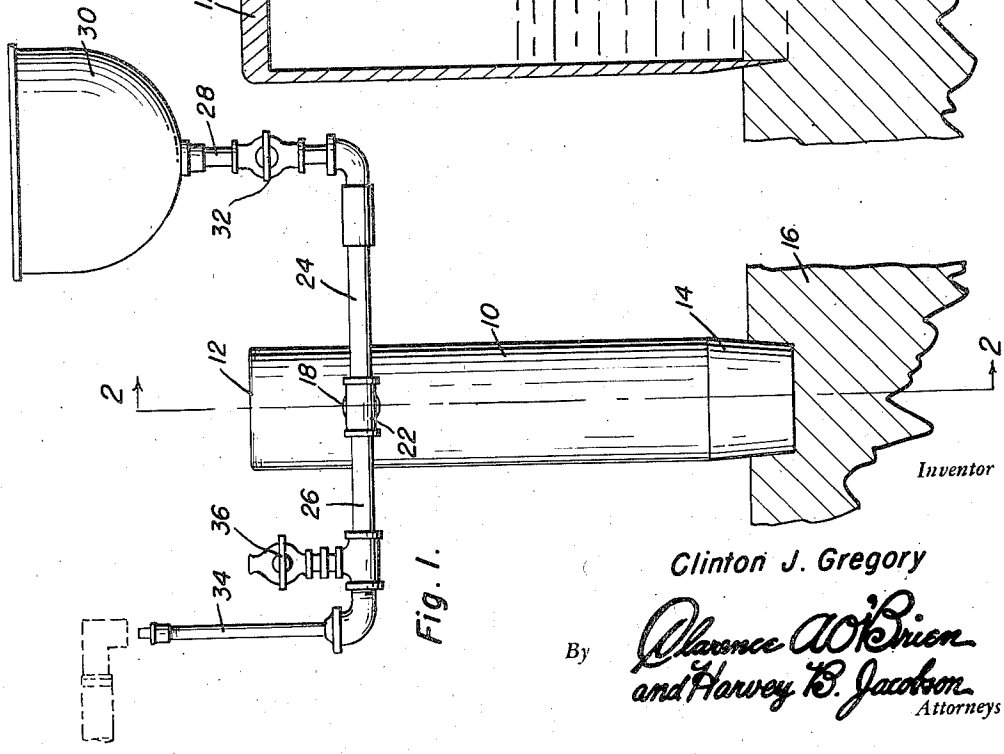


Fig. 1.

Inventor

Clinton J. Gregory

By Clarence O'Brien and Harvey B. Jacobson

Attorneys

Patented Feb. 22, 1949

2,462,486

UNITED STATES PATENT OFFICE

2,462,486

DEVICE FOR TREATING TIMBER

Clinton J. Gregory, Hot Springs, S. Dak.

Application July 29, 1947, Serial No. 764,398

6 Claims. (Cl. 21—7)

1

This invention relates to new and useful improvements in devices for treating timber and the primary object of the present invention is to provide a body that is partially driven into one end of a pile, post or the like and including novel and improved means for supplying fluid under pressure through the body to permeate the pores of the pile.

Another important object of the present invention is to provide a device for treating timber including a hollow body, and a fluid receptacle for the body that is so positioned as to give a hydrostatic head to the fluid so that the same will enter the body in a convenient manner without the necessity of using a pump.

A further object of the present invention is to provide an apparatus for treating timber that is readily and quickly assembled for use or disassembled to facilitate convenient shipping or storing of the same.

A still further aim of the present invention is to provide a device for treating timber that is simple and practical in construction, strong and reliable in use, relatively inexpensive to manufacture, and otherwise well adapted for the purposes for which the same is intended.

Other objects and advantages reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a front elevational view of the present invention in use;

Figure 2 is a vertical sectional view taken substantially on the plane of section line 2—2 of Figure 1, and with parts of the fluid receptacle broken away and shown in section; and

Figure 3 is a top plan view of the present invention.

Referring now to the drawings in detail, wherein for the purpose of illustration, there is disclosed a preferred embodiment of the present invention, the numeral 10 represents a hollow, preferably cylindrical body, closed at one terminal portion 12 and having its opposite terminal portion 14 annularly beveled or tapered facilitating the same to be driven into one end of a post, pile or the like 16.

Integrally formed with the body 10 adjacent the closed end thereof, is an internally threaded nipple 18 communicating with the interior of the body. This nipple receivably engages one externally threaded end of an inlet conduit 20. Threadingly engaging the opposite end of conduit 20, is a T-joint 22, the free openings of which receivably engage branch pipes 24 and 26 extending outwardly from opposite sides of the joint 22. The axis of the branch pipes 24 and 26, is preferably disposed at right angles to the axis of the conduit 20.

2

The outer end of one of these branch pipes, for example, 24, is suitably coupled to the lower end of a vertically disposed tubular extension 28 communicating at its upper end with the lower portion of a fluid receptacle 30. A manually operated valve 32 is interposed between the ends of the extension 28, for regulating a flow of fluid from the receptacle 30 to the conduit 20.

The outer end of branch pipe 26, is coupled by suitable means, to an air pressure line 34 leading from a suitable source of air pressure. A second manually operated valve 36 is interposed in branch pipe 26 for regulating the air pressure entering conduit 20.

It should be noted that the lower end of the fluid receptacle 30 is disposed in a horizontal plane above the closed end 12 of the body 10, so that when valve 32 is opened, fluid in the receptacle will flow under a hydrostatic head to the conduit 20 and by turning valve 36 in an open position, the fluid is forced through the pile 16 to permeate the pores of the pile. Obviously, the fluid placed in the receptacle may be a solution of any desired character to preserve and add durable qualities to the pile.

During the driving operation of the tapered end 14 of the body 10 into the pile or the like 16, it is preferred that the conduit 20 be removed from the nipple 18, so that vibrations prevalent in the body during the driving, will in no way affect the tight connection of the conduit with the receptacle and the air pressure line.

In view of the foregoing description taken in conjunction with the accompanying drawing, it is believed that a clear understanding of the device will be quite apparent to those skilled in this art. A more detailed description is accordingly deemed unnecessary.

It is to be understood, however, that even though there is herein shown and described a preferred embodiment of the invention, the same is susceptible to certain changes fully comprehended by the spirit of the invention as herein described and the scope of the appended claims.

Having described the invention, what is claimed as new is:

1. A device for treating timber comprising a hollow body closed at one end, the opposite end of said body being beveled to engage one end of a

pile, an inlet conduit for said body, a fluid receptacle communicating with said conduit, means for regulating a flow of fluid from said receptacle to said conduit, an air pressure line connected to said conduit, and means for regulating pressure entering said conduit.

2. The combination of claim 1 wherein the lower end of said receptacle is disposed in a plane above the upper end of said body.

3. The combination of claim 1 wherein said means for regulating a flow of fluid from said receptacle to said conduit includes valve means.

4. A device for treating timber comprising a hollow body closed at one end, the opposite end of said body being beveled, the beveled end of said body adapted to be driven into one end of a pile, a nipple carried by said body adjacent its closed end, said nipple communicating with the interior of said body, an inlet conduit receivably engaging said nipple, and means for admitting fluid under pressure into said conduit, said last-mentioned means including a branch pipe carried by said conduit, said branch pipe being disposed at right angles to said conduit, a fluid receptacle connected to one end of said branch pipe, and an air pressure line connected to the other end of said branch pipe.

5. The combination of claim 4 wherein said fluid receptacle is disposed in a plane above the closed end of said body so that a fluid may flow from said receptacle to said body under a hydrostatic head.

6. A device for treating timber comprising a hollow body closed at one end, the opposite end of said body being beveled, the beveled end of said body adapted to be driven into one end of a pile, a nipple carried by said body adjacent its closed end, said nipple communicating with the interior of said body, an inlet conduit receivably engaging said nipple, a branch pipe carried by said conduit at right angles thereto, a vertical tubular extension at one end of said branch pipe, a fluid receptacle carried by said tubular extension, a valve interposed in said extension for controlling a flow of fluid from said receptacle to said conduit, an air pressure line connected to the opposite end of said branch pipe, and a valve for regulating the air pressure entering said conduit.

CLINTON J. GREGORY.

REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
111,784	Smyth	Mar. 14, 1871