The present invention relates to a closure for the upper end of an oil well tube when said tube is being pulled from the well for the purpose of preventing the oil from pouring out of the tube and soaking the roundabout.

It is the common practice to pull the tubes from the oil well without taking any precautions to prevent the soaking with oil of the roundabout and of course such oil is a total loss. With the present invention, however, the tubes may be pulled from the well with practically little or no oil pouring therefrom and this oil may be saved by allowing it to be poured into suitable receptacles.

Another very important object of the invention lies in the combination of a tube-engaging apparatus and a closure for displacing the upper end of the tube with means for the purpose of the cap when desired.

A still further important object of the invention is to provide a device of this nature which is very simple in its construction, inexpensive to manufacture, easy and convenient to handle, and otherwise well adapted to the purpose for which it is designed. With the above and numerous other objects in view as will appear as the description proceeds, the invention resides in certain novel features of construction, and in the combination and arrangement of parts as will be hereinafter more fully described and claimed.

In the drawings:

Figure 1 is an elevation of a tube-engaging apparatus and my improved cap on the upper end of the tube.

Fig. 2 is an enlarged detail elevation of the cap showing the same on a tube.

Fig. 3 is a sectional view through the cap.

Fig. 4 is a bottom plan view of the cap.

Referring to the drawing in detail, it will be seen that 5 denotes an oil well, having the usual head 6 thereon which provides the coupling for other tubes as will be well understood by those skilled in this art. The numeral 7 denotes a tube-engaging member which is adapted to abut the shoulder formed by the head 6. Links 8 are engaged with the member 7 and are also engaged with a cross member 9 having a ring 10 engaged therewith. The parts thus far described of the tube-engaging member are quite conventional and well-known in the art. I provide a bracket 11 depending from the cross member 9 and having journaled therein a pulley 12. My improved cap is denoted generally by the letter C and comprises a disk 14 having an annular depending flange 15 the lower end of which is provided with an inwardly directed bead 16 formed with a notch 17. A gasket 18 is mounted in the cap, being held in place by the flange 15. An eye 19 rises from the center of the disk 14 and is engaged with a table or rope 20 that is trained over the pulley 12. When the tube-engaging apparatus is mounted on the tube in the well-known manner, the cap C is seated on the upper end of the tube and therefore as the tube is pulled from the well, the oil therein will not flow out of the lower end thereof since atmospheric pressure will hold the oil in the tube. After the tube has been raised out of the well, the lower end thereof may be inserted in a suitable receptacle and the cable 20 pulled to lift the cap from the upper end of the tube so that the oil in the tube will flow into the receptacle.

Most frequently, it is very difficult to release the cap from the upper end of the tube merely by pulling upon the cable 20 and a prying implement is necessary and this is accomplished by the purpose of the notch 17 as the prying implement may be inserted into the notch so as to pry the cap from the tube.

With the use of this improved structure it will be seen that not only is the oil saved which is in the tubes being pulled from the well, but the roundabouts are protected from becoming soaked as is usual under the present common practice. The structure is exceedingly simple adding very little to the initial cost. It will also be seen that the device is easy to handle and will last indefinitely and the only part that will have to be replaced at long intervals will be the gasket 18.

It is thought that the construction, utility, and advantages of this invention will now be clearly understood by those skilled in this art without a more detailed description thereof. The present embodiment of the invention has been disclosed in detail merely by way of example since in actual practice it attains the features of advantage enumerated as desirable in the statement of the invention and the above description. It will be apparent that changes in the details of construction, and in the combination and
arrangement of parts may be resorted to without departing from the spirit or scope of the invention as hereinafter claimed or sacrificing any of its advantages.

5. Having thus described my invention, what I claim as new is:

1. A device of the class described comprising a cap, a gasket in the cap, an eye on the cap, a cable engaged with the eye, an oil well tube engaging apparatus, a pulley mounted in the apparatus, said cable being trained over said pulley.

2. In combination, an apparatus for lifting an oil well tube including means for engaging the tube, means for closing the upper end of the oil well tube, and means in the apparatus for opening the closing means.

In testimony whereof I affix my signature.

JAMES W. COFFMAN.