July 29, 1969 N. E. WICKBERG ET AL 3,458,069

CONVERSION TO FORKLIFT

Filed Sept. 21, 1967

FIG. 1.

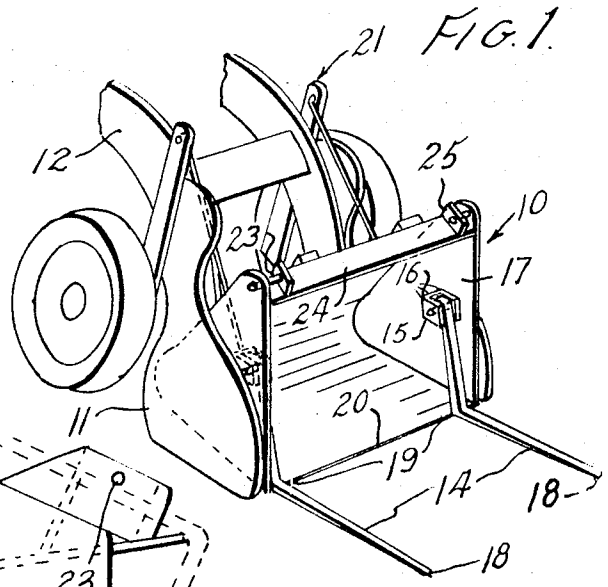


FIG. 2.

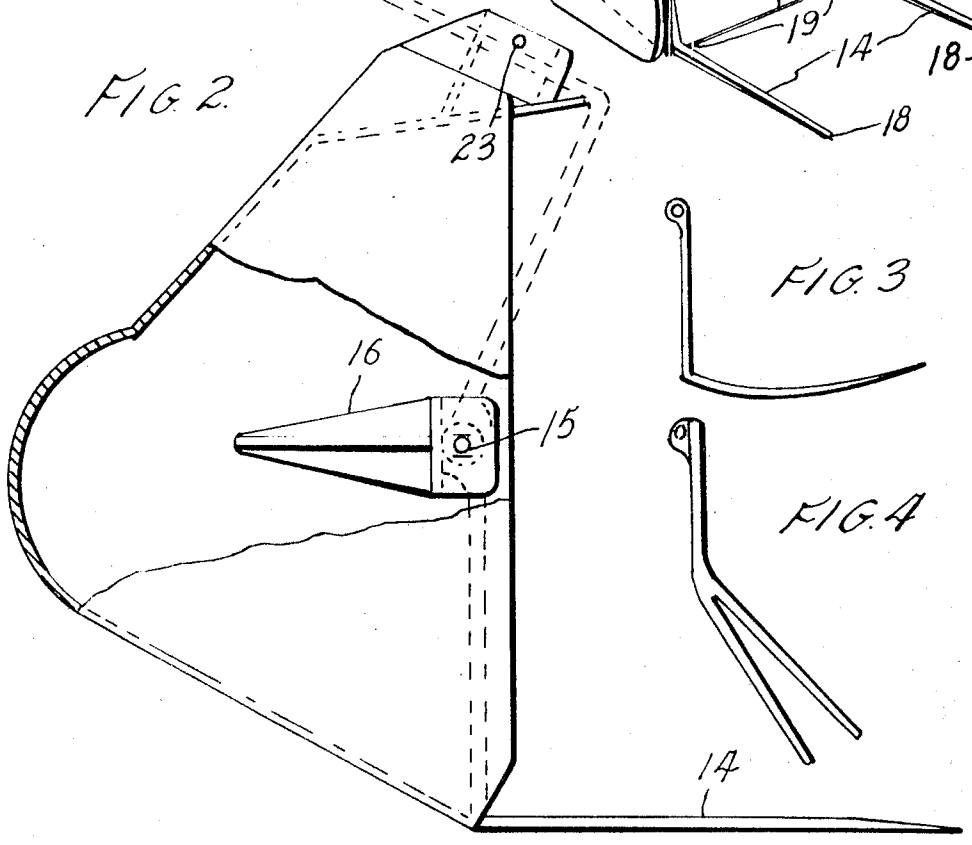


FIG. 3

FIG. 4

INVENTORS
NORMAN E. WICKBERG
LE ROY R. STURN JR.
BY Howard T. Jeandron
AGENT

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CONVERSION TO FORKLIFT

Norman E. Wickberg, Fair Haven, and Le Roy R. Sturn, Jr., Shrewsbury, N.J., assignors to Wickberg and Sturn Construction Co., Perth Amboy, N.J.

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U.S. Cl. 214—145 3 Claims

ABSTRACT OF THE DISCLOSURE

An apparatus to be added permanently to a scoop bucket of a tractor to quickly and easily convert a front end loader scoop bucket into a forklift, in which the loading extended prongs are pivotally affixed to the bucket and extend from the leading edge of the bucket in an operative position but are retractable to an out of the way position over the bucket when not in use.

This invention relates to an accessory for a scoop bucket tractor and more particularly to a forklift conversion.

Many of the tractors that are provided with a scoop bucket are limited in their use to the lifting of earth, stones, etc. The limitation is due to the configuration of the scoop bucket. The bucket does not lend itself to the handling of wide or long elements such as trees that have been cut, logs, pipes, beams and reinforcing steel.

It is an object of this invention to provide an accessory for the scoop bucket that will provide the means to pick up and carry wide or long objects.

It is a further object of this invention to provide an accessory for a scoop bucket in the form of a pair of elongated forks that are attached to a bucket to protrude from the mouth of the bucket for picking up objects that will not fit within the bucket.

It is a still further object of this invention to provide an accessory for a scoop bucket in the form of a pair of elongated forks that are pivotally attached to a bucket to protrude from the mouth of the bucket for picking up objects that will not fit within the bucket and in which the forks may be moved into a retracted out of the way position when not in use.

Further objects of this invention shall be apparent by reference to the accompanying detailed description and the drawings in which—

FIG. 1 is a perspective view of the scoop bucket and forks,

FIG. 2 is an enlarged side elevational view of the scoop bucket and forks partially in cross section.

FIG. 3 is a further embodiment of the fork, and

FIG. 4 is a still further embodiment of the fork.

Referring to the drawings and particularly FIG. 1, there is illustrated a scoop bucket **10** that is mounted between a pair of tractor frames **11** which extend from a portion of the tractor framework **12**, to illustrate the mounting of the scoop bucket **10**. Although the bucket **10** is normally used with the tractor to dig in and scoop up loose materials such as sand, gravel, ashes or dirt, in the normal use of the tractor and bucket there are many objects that are not easily moved and some that cannot be lifted with the bucket **10**. These objects may be fallen trees and logs, pipes, beams, reinforcing steel or long timbers. Therefore the tractor either cannot be used or the bucket must be removed and some sort of carrier mounted to the tractor

to permit lifting or carrying elongated members. Rather than having the delay and the trouble in making changes, this invention is primarily concerned with an accessory that many be mounted directly to the bucket **10** to permit handling all kinds of elongated members and that is, not only the ability to scoop or pick up the members from the ground, but to lift and carry the members as desired. The accessory consists of a pair of forks **14** that are pivotally affixed to the bucket **10** so that they may be dropped to the position as illustrated in FIG. 1 in which each fork **14** is mounted by a pin **15**, the pin **15** passing through a bracket **16** that is attached to the interior face of the side **17** of the bucket, the bracket **16** being welded to the side **17**. In the open position, the fork tip **18** will face away from the bucket and at the right angle bend **19** of the fork it will rest upon the blade edge **20** of the bucket. The bucket **10** may be tipped forward by the tractor controls **21** until the fork tips are in a horizontal position for picking up any object to be carried by the forks **14**. The forks **14** are constructed of a 1" steel that provides ample strength for carrying up to the capacity of the tractor in its lift of the bucket in normal use. The particular tractor to which the forks **14** were attached has a capacity load of 5 tons. Thus the forks **14** are made heavy enough to permit picking up a 5 ton load.

It is to be noted that when the forks **14** are not in use, each one may be pivotally moved to the position illustrated (in dotted lines) in FIG. 2. In that position the extended arm of the fork will abut with the upper shelf **24** of the bucket **10**. On each side of shelf **24** there is provided a bracket **25** with a pin **23**, pin **23** extending through the side **17** of the bucket and through bracket **25**. Thus with the fork in this abutting position, pin **23** may be inserted thus locking the fork in the retracted position which is entirely out of the way as illustrated in FIG. 2.

Although a particular right angle shaped fork has been illustrated as being the most effective fork in normal use, this invention shall not be limited to the exact configuration of the fork **14**. Rather fork **14** may take other shapes such as a curved extended prong as shown in FIG. 3 or fork **14** may also be divided to have more than the single projecting prong as illustrated in FIG. 4 without departing from the spirit of this invention and although fork **14** has been shown pivotally mounted to the side of the bucket so that it will, in use, abut with the working edge of the bucket, the mounting may be moved slightly to the rear of the bucket to allow the fork to rest upon the lower surface of the bucket to produce a greater strength where the forks **14** are to be used to lift an exceptionally heavy load. In this instance the bucket is simply reinforcing the extended prong. The brackets may be mounted in a shiftable position for attachment as shown or to be moved backward for greater strength. It is to be understood that although the forks **14** are shown as fitted to a particular bucket, they may be similarly formed to fit any other bucket that is used in a similar fashion without departing from the spirit of this invention and this invention shall be limited only by the appended claims.

What is claimed is:

1. In a tractor having a scoop bucket for handling loose material, an accessory in the form of forks to be added to said scoop bucket to permit handling elongated objects that cannot be picked up or carried by said scoop bucket, said scoop bucket having an open mouth and a leading edge on the lower surface of said open mouth, said forks

pivotally supported by said bucket in spaced relationship in front of and on each side of said bucket and movable to an operating position extending outward from the leading edge and movable to a retracted position extending upward over the top of said bucket.

2. In a device according to claim 1 in which a pair of brackets with locking pins are affixed to the top of the said bucket and said retractable forks may be locked in an inoperative position when not in use.

3. In a device according to claim 1 in which said forks are formed of two legs approximately 90° apart, one leg of each fork formed with an attaching end having a pivotal pin passing through said fork and said bucket side wall and the opposite end of the one leg abutting with the leading edge of the mouth of said bucket, said second leg of each fork extending outward from said leading edge as a prong.

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HUGO O. SCHULZ, Primary Examiner

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