No. 856,498. PATENTED JUNE 11, 1907.

G. H. TATGE.

WRENCH.

APPLICATION FILED AUG. 29, 1906.

Fig. 1,

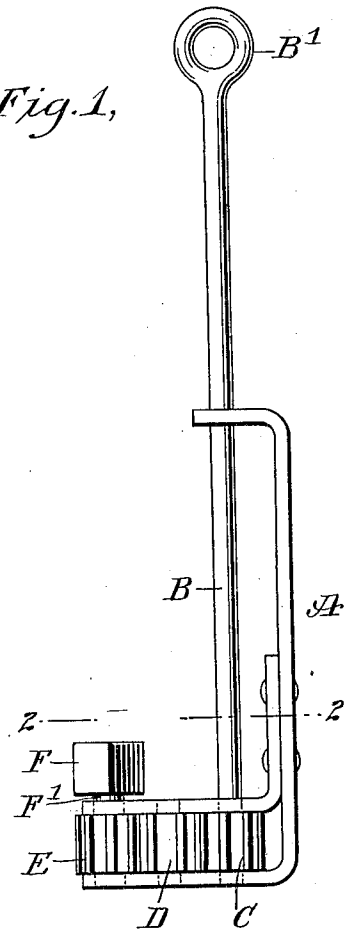


Fig. 2,

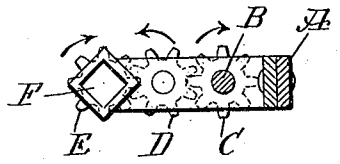
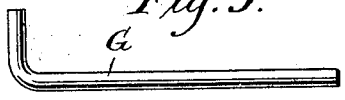


Fig. 3.



WITNESSES

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GEORGE H. TATGE, OF RANDOLPH, NEBRASKA.

WRENCH.

No. 856,498. Specification of Letters Patent. Patented June 11, 1907.

Application filed August 29, 1906. Serial No. 332,476.

To all whom it may concern:

Be it known that I, GEORGE H. TATGE, a citizen of the United States, and a resident of Randolph, in the county of Cedar and State of Nebraska, have invented a new and Improved Wrench, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved wrench, more especially designed for screwing up or unscrewing the nuts on the teeth of threshing machine cylinders.

The invention consists of novel features and parts and combinations of the same, which will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the improvement; Fig. 2 is a sectional plan view of the same on the line 2—2 of Fig. 1, and Fig. 3 is a side elevation of the handle for turning the shaft.

On a suitably constructed supporting frame A is journaled a shaft B carrying at one end a gear wheel C in mesh with an intermediate gear wheel D meshing with a gear wheel E secured on the shank F′ of a nut socket F for engaging the nut to be screwed up or unscrewed on the tooth of a threshing machine cylinder. The shank F′ of the socket F is in the form of a shaft journaled in the supporting frame A, so that when the shaft B is turned in one direction then the intermediate gear wheel D is turned in the reverse direction, and the gear wheel E for the socket F is turned in the same direction as the shaft B and its gear wheel C. Now in order to conveniently turn the shaft B by hand, the upper or outer end thereof terminates in an eye B′ for receiving a handle G in the form of an angular bar (illustrated in Fig. 3) so that the operator can conveniently turn the shaft B to rotate the socket F in the same direction in which the shaft B is turned. By the arrangement described the operator can conveniently engage the socket F with the nut to be turned, especially as the socket F is spaced a desired distance from the shaft B owing to the use of the train of gear wheels, consisting of the gear wheels C, D and E. By arranging the axes of the several gear wheels C, D and E in the same vertical plane, it is evident that the wrench can be made very narrow so as to permit convenient engagement of the socket F with the nut to be turned. It will also be noticed that the socket F can be readily interchanged with a socket of larger or smaller size, to suit different sizes of nuts to be turned.

By using a separate handle G for turning the shaft B it is evident that the wrench can be conveniently manipulated in inaccessible places in which only a partial turning of the shaft B at a time is permissible until the position of the handle G is changed in the eye B′.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

A wrench comprising a frame composed of a plurality of plates, each of said plates being arranged in parallelism and spaced apart from each other, and each being provided with an angular portion, said angular portions being secured together, a shaft journaled in the plates and provided with a gear therebetween, a second shaft journaled in the plates, said second shaft having a socket outside of the plates, and a gear wheel therebetween, an idler gear journaled between the plates and meshing with both of said first named gears, said first named shaft being extended outside of the plates to form a handle, and one of said plates having its angular portion extended to form a bearing for the handle.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE H. TATGE.

Witnesses:

C. B. WILLEY,

W. H. STAGEMAN.