W. L. KIBBE.

SICKLE BAR.

APPLICATION FILED OCT. 30, 1908.

922,291. Patented May 18, 1909.

Fig. 1.

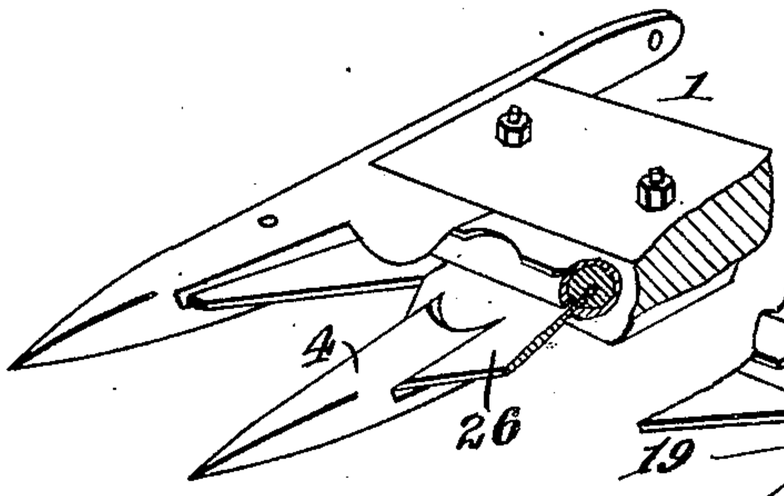

Fig. 4.

Fig. 5.

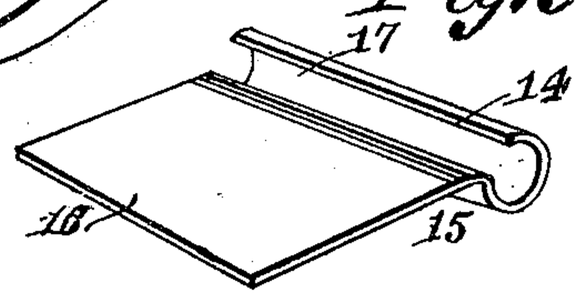

Fig. 2.

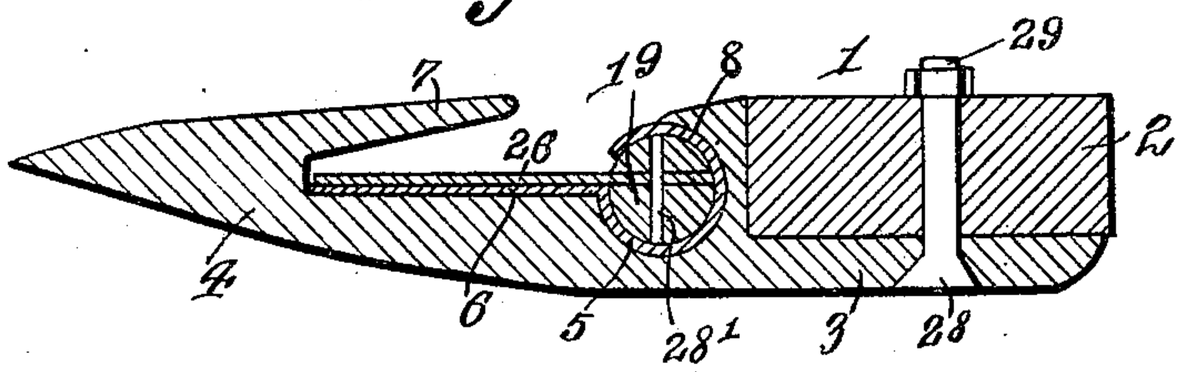

Fig. 3.

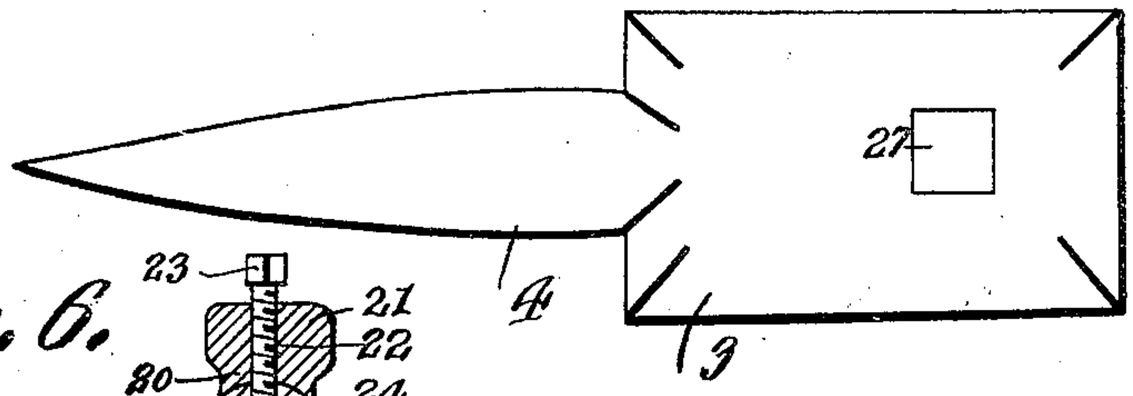

Fig. 6.

Witnesses

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SICKLE-BAR.

No. 922,291. Specification of Letters Patent. Patented May 18, 1909.

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To all whom it may concern:

Be it known that I, WILLIAM L. KIBBE, a citizen of the United States, residing at Johnson, in the county of Stanton and State of Kansas, have invented new and useful Improvements in Sickle-Bars, of which the following is a specification.

This invention relates to sickle bars, and more particularly to the construction of the fingers, and has for an object to provide a simple and novel form of ledger plate for each finger of the said sickle bar and to construct the said plates so that they will effectively take up lost motion of the cutting knife, thus allowing the same to work at all times with perfect freedom and with accuracy.

A further object of this invention is to provide means which will enable the knife bar to be removed from the fingers without removing the usual head at the end of the said cutter bar.

Other objects and advantages will be apparent as the nature of the invention is better set forth, and it will be understood that changes within the scope of the claims may be resorted to without departing from the spirit of the invention.

In the drawing, forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views:—Figure 1 is a perspective view of the sickle bar, Fig. 2 is a transverse sectional view taken on the line 2—2 of Fig. 1, Fig. 3 is a bottom plan view of one of the fingers, Fig. 4 is a perspective view of one of the ledger plates, Fig. 5 is a perspective view of another of the ledger plates, Fig. 6 is a detail section taken on the line 6—6 of Fig. 1.

Referring now more particularly to the drawing, there is shown a sickle bar 1 which consists of a finger bar 2 adapted to receive the reduced portions 3 of guard fingers 4. Each finger is provided with alining substantially semi-circular grooves 5 for a purpose to be hereinafter more fully described. Each groove opens onto the flat face 6 of its finger and as shown, the said flat faces of the fingers have disposed thereabove the overhanging portions 7 in the ordinary manner. Metallic ledger plates 8 are provided for the fingers 4 and are formed each from a single piece of sheet material bent in tubular form as shown at 9 to fit the grooves 5, and as shown, each finger is provided with a slot 10 to aline with the open portions of the grooves 5 and with lips 11 seated upon the flat faces 6 of the fingers. A shoe is shown at 12 and is also provided with a groove 13 disposed in line with the grooves 5 but is somewhat larger in diameter and receives the tubular portion 14 of a ledger plate 15 which is also provided with a lip 16 similar to the lips11. The ledger plate 16 is provided with a slit 17. The tubular portion 14 of the ledger plate 15 receives a correspondingly shaped head 18 at one end of a knife bar 19. The head 18 is provided with a contracted neck 20 disposed in the slit 17 in the tubular portion 14 of the ledger plate 15, and as shown the said neck is provided with a head 21 in which is formed threaded passages 22 for receiving correspondingly threaded stems of set screws 23 which are thus adapted to engage the cutter bar 19 and to hold the same engaged with the said head. The cutter bar 19 is formed from two semi-cylindrical strips 24 and 25 having disposed therebetween cutting knives 26 of usual construction. The knives 26 are thus disposed in such manner that they operate upon the upper surfaces of the lips 11 and 16 of the plates 8 and 15. It is obvious that the lips 11 thus obviate wear upon the fingers 4 and the tubular portions of the said plates also obviate wear upon other parts of the fingers as will be clearly appreciated, and it will be understood that should lost motion present itself at the cutter bar it can be quickly traced to the particular objectionable finger and such trouble readily overcome by the displacement of worn plates and replacing the same by new ones. Each finger is preferably provided with a squared passage 27 to receive the correspondingly shaped head 28 of a clamping bolt 29 adapted to be engaged with the finger bar 2. It is desirable to retain the knives 26 to the knife bar by means of dowel pins or like fastening devices shown at 28′ in the drawing.

By constructing the cutter bar in the manner herein shown and described it is obvious that it may be removed from the head 18 without disturbing the latter from its driven connections. It will of course be obvious that the said head 18 may be connected in any suitable manner to impart to the knife bar reciprocatory motion.

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

1. A finger bar having a plurality of guard fingers provided with alining grooves, ledger plates carried by the fingers provided with tubular rear portions seated in said grooves,

and a cylindrical cutter bar mounted in the tubular portions of said plates.

2. A finger bar having a plurality of fingers provided with alining grooves, ledger plates having tubular rear portions seated in said grooves, a cylindrical sickle bar mounted in the tubular portions of said plates, said tubular rear portions of the ledger plates having longitudinally extending slits formed therein so that the knives of the sickle bar are free for reciprocatory motion.

3. A finger bar having a plurality of fingers provided with alining grooves, cutting knives ledger plates carried by the fingers having portions at the rear seated in said grooves, said portions having alining slits formed therein through which are disposed portions of said cutting knives.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM L. KIBBE.

Witnesses:

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