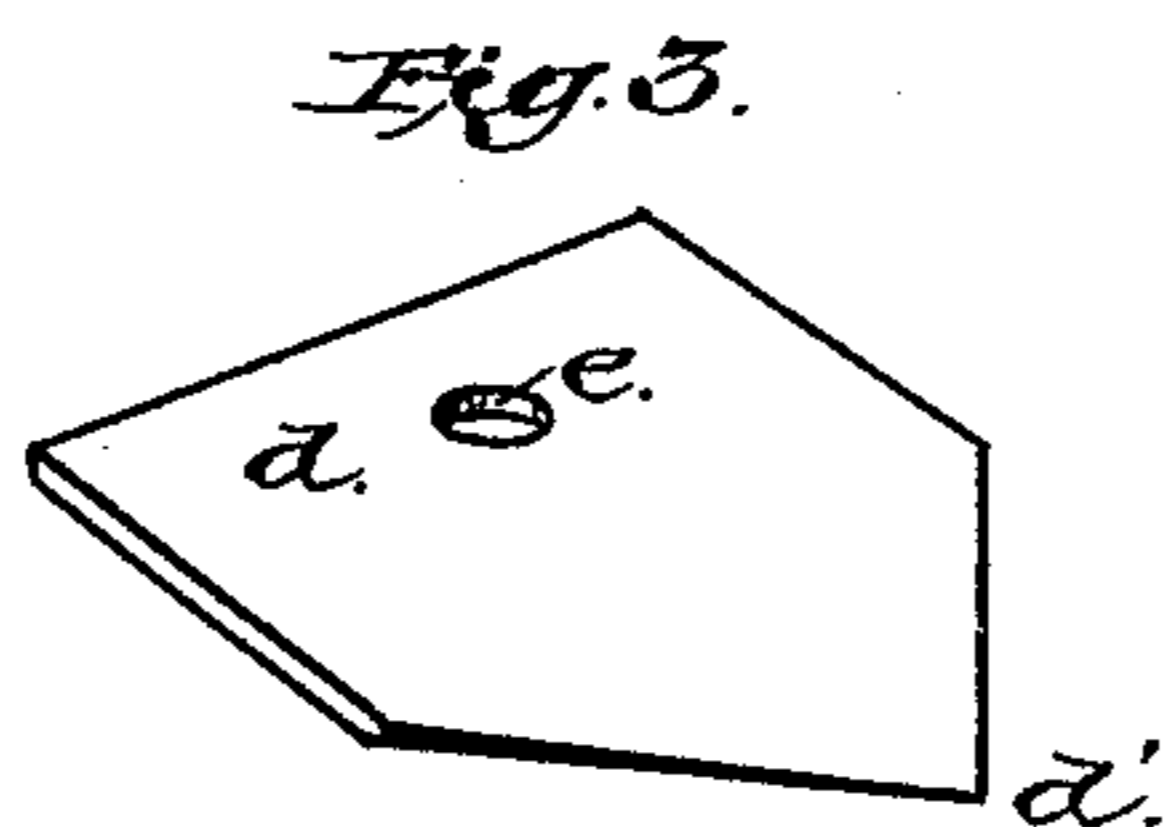
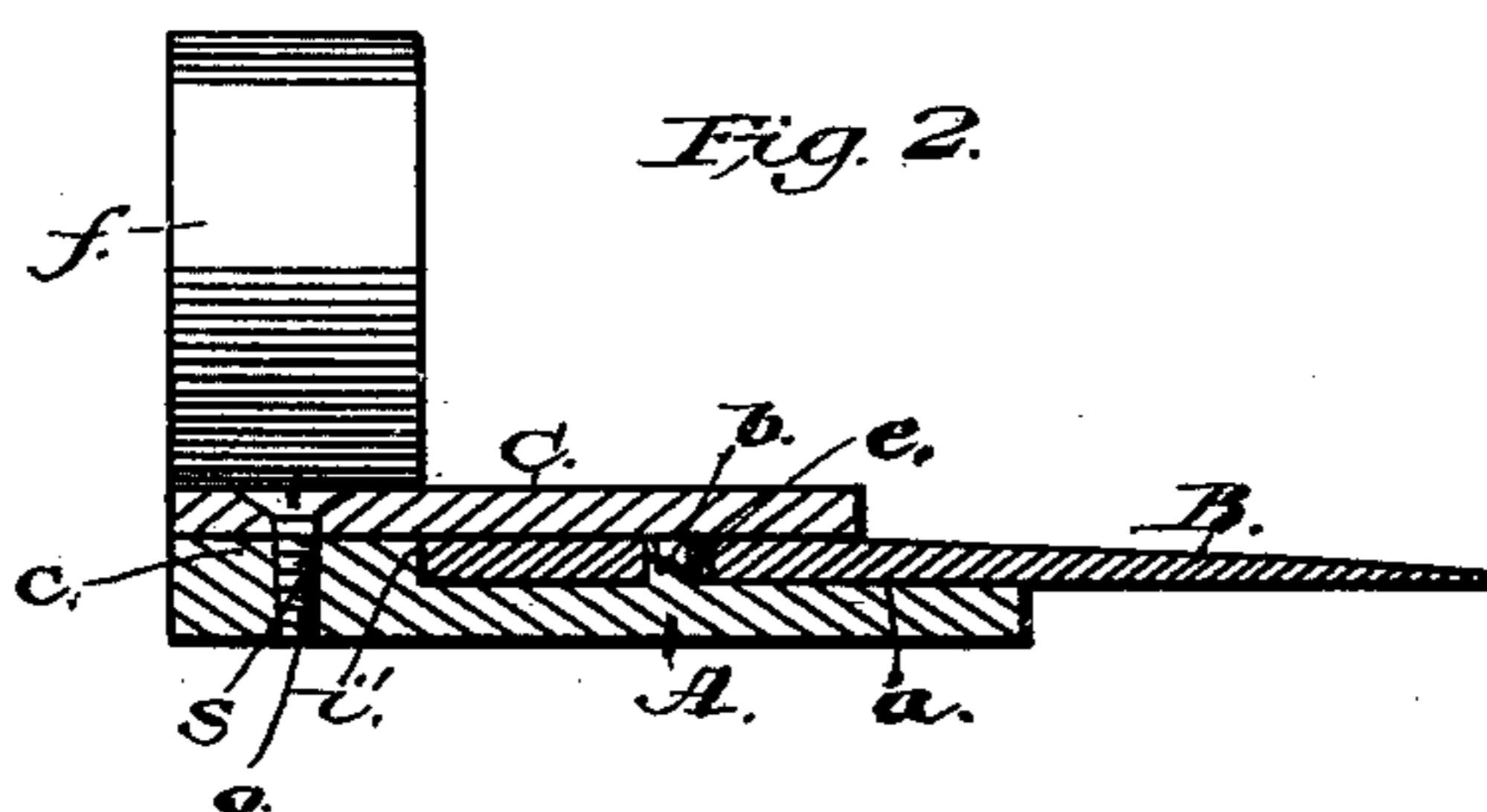
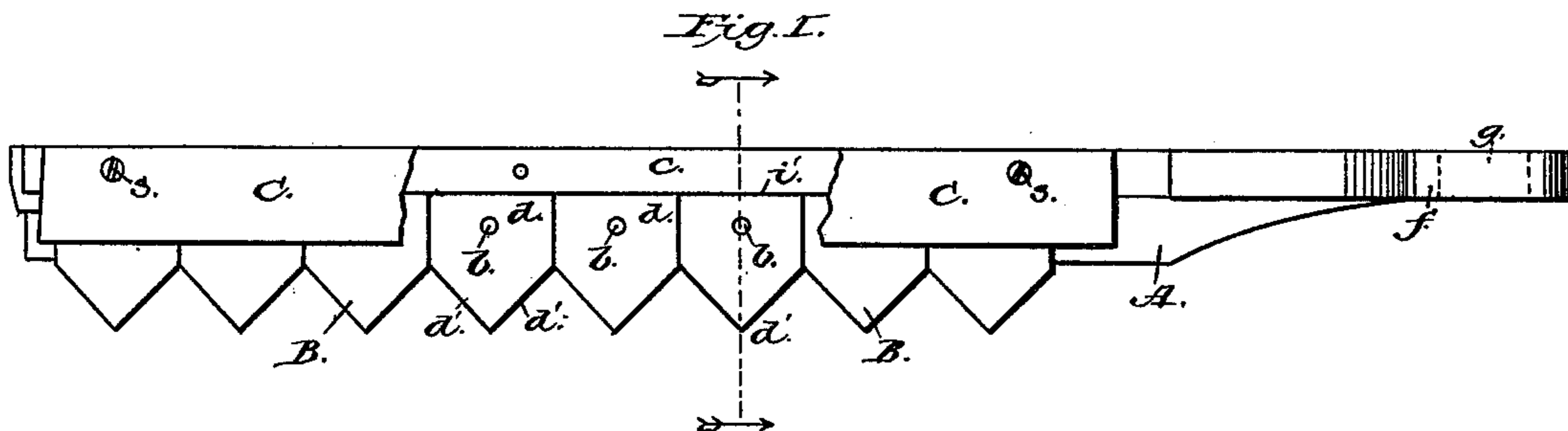


(Model.)

J. D. JAMES.
Sickle Bar for Harvester.

No. 229,417.

Patented June 29, 1880.



WITNESSES

Villette Anderson.
E. J. Massi.

INVENTOR

James D. James.
by E. W. Anderson
his ATTORNEY

UNITED STATES PATENT OFFICE.

JAMES D. JAMES, OF MINERAL POINT, WISCONSIN.

SICKLE-BAR FOR HARVESTERS.

SPECIFICATION forming part of Letters Patent No. 229,417, dated June 29, 1880.

Application filed May 4, 1880. (Model.)

To all whom it may concern:

Be it known that I, JAMES D. JAMES, of Mineral Point, in the county of Iowa and State of Wisconsin, have invented a new and valuable Improvement in Sickle-Bars for Reaping and Mowing Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a top view of my improved sickle-bar with the lock-bar partly broken away. Fig. 2 is a transverse section, and Fig. 3 is a detail.

This invention has relation to improvements in sickle-bars for reapers and mowers; and it consists in a sickle-bar constructed substantially as hereinafter shown and described.

In the annexed drawings, the letter A designates the sickle-bar plate, the same being of the usual length, and provided on its front edge with a rabbet, *a*, in depth equal to the thickness of the tooth-sections B.

Projecting upward from the rabbet *a*, at about its middle portion, are spurs *b*, arranged in line with each other at proper intervals apart, and extending up from said rabbet to a level with the back piece or spine, *c*. These projecting pins are equal in number to the tooth-sections, one thereof being appropriate to each section. These sections B are constructed with squared bodies *d* and double-edged points *d'*, of angular form, and are each provided with a perforation, *e*, of a size to receive one of the spurs *b* snugly. When in position on the plate A the heels of the sections B bear snugly up against the shoulder *i'* of the spine *c*, and their lateral edges are in close contact, so that when they are held against vertical displacement relative to the said plate A they will be firmly fixed to the same. This is accomplished by means of a flat metallic lock-bar, C, resting on the spine and tooth-

sections B, and overhanging the latter—that is, breaking the joint of the section and spine, as indicated in Fig. 2.

Bar C is removably secured to plate A by means of screws *s* passing through perforations in said bar and engaging threaded holes *o* in the spine of said plate. The engagement of the spurs in the perforation *e* of the sections B effectually prevents lateral displacement. The abutting of the heels of said sections against the shoulder *i'* of the plate A holds them against rotation, and the locking-bar C prevents all vertical motion. Hence the sections B are very securely fastened; but by taking off the bar C any one or more of the teeth of the series may be removed, if broken, and replaced by a new one, or they may be all taken out for sharpening by simply lifting them out of engagement with the spurs aforesaid.

At the head of plate A is a vertical lug, *f*, provided with an eye, *g*, the axis of which is horizontal and at right angles to the length of the said plate, and which receives the wrist on the driving-pitman.

What I claim as new, and desire to secure by Letters Patent, is—

The sickle-bar for mowers and reapers, consisting of the plate A, having the rabbet *a*, the raised spine *c*, the vertical shoulder *i'*, and the projecting spurs *b*, the tooth-sections B, having each the perforation *e* in its squared body *d*, arranged side by side and abutting closely against the shoulder aforesaid, and the locking-bar C, breaking the joint of the spine and teeth, and secured to the former, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JAMES D. JAMES.

Witnesses:

JOHN COMMINS,
PHILIPP BRANGER.