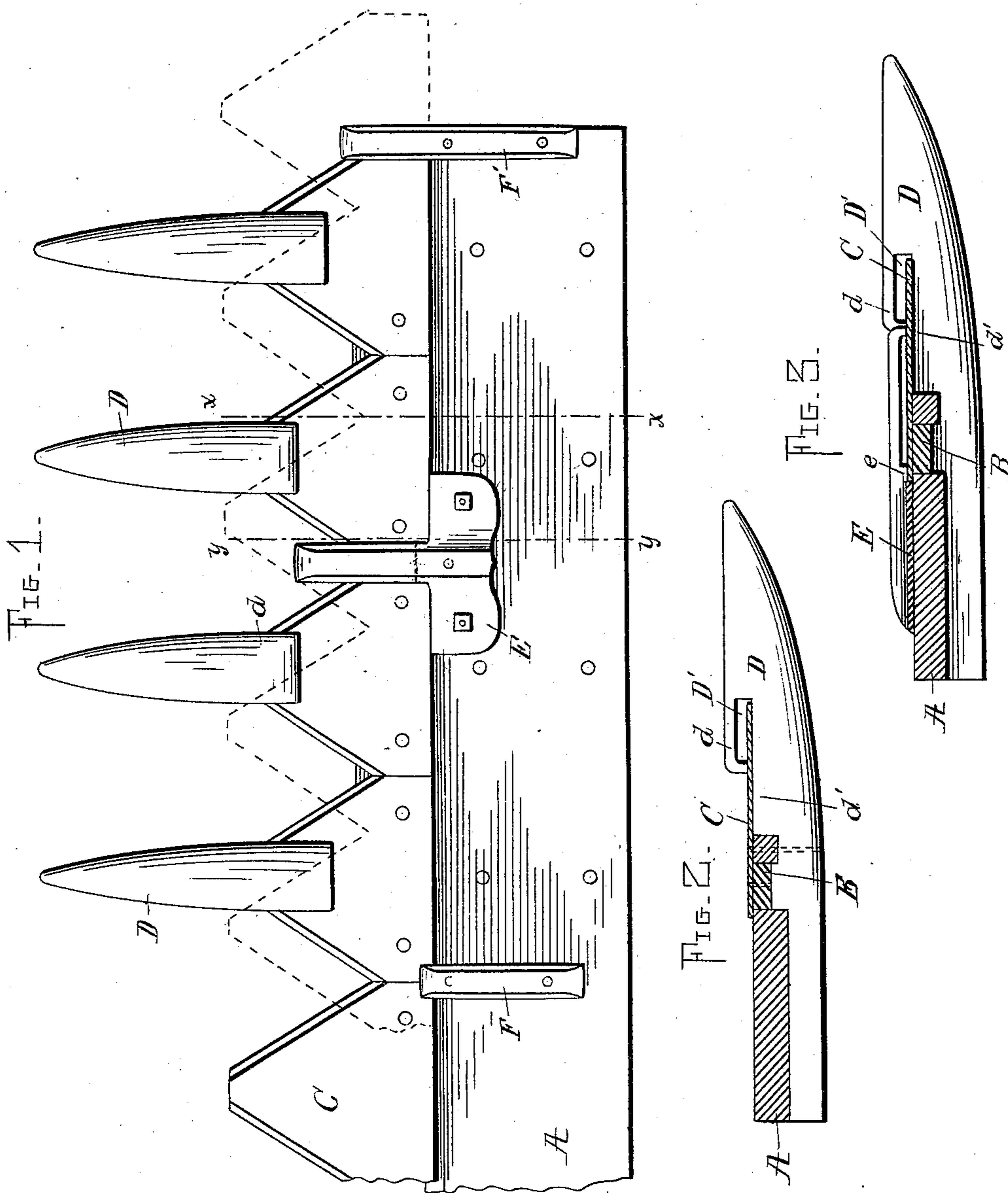


(No Model.)

W. S. FOX.
ATTACHMENT FOR MOWING MACHINES.

No. 359,351.

Patented Mar. 15, 1887.



Witnesses.

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UNITED STATES PATENT OFFICE.

WILLIAM S. FOX, OF SHORT CREEK, OHIO.

ATTACHMENT FOR MOWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 359,351, dated March 15, 1887.

Application filed October 18, 1886. Serial No. 216,539. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. FOX, a citizen of the United States, residing at Short Creek, in the county of Harrison and State of Ohio, have invented certain new and useful Improvements in Attachments for Mowing-Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to cutting apparatus for harvesting and mowing machines, and has for its object to obviate and prevent any vertical movement of the cutter-sections and hold them down upon the knife portion of the guard-fingers.

The improvement consists in the novel features hereinafter more fully described, claimed, and shown in the annexed drawings, in which—

Figure 1 is a plan view of a cutting apparatus provided with my improvements. Fig. 2 is a sectional view on the line *xx* of Fig. 1, and Fig. 3 is a sectional view on the line *yy* of Fig. 1.

The finger-bar A, the cutter-bar B, and the cutter-sections C are old and of well-known construction. The guard-fingers D are of usual arrangement and have the ordinary slot, D', forming the overhanging guard *d*, through which the cutters work in the well-known manner.

In the following description I do not wish to be understood as limiting myself to having the rear ends of all the guards turned down and bearing upon the cutter-sections, as in practice it has been found sufficient if only a few are so constructed and located at intervals throughout the length of the cutter-bar, and for this reason in Fig. 1 two of the guards only are shown as having their rear ends turned down.

The vital part of my invention consists in having the rear end of the guard *d* bent down so as to bear upon the top of the cutters and hold them at all times upon the cutting-face *d'* of said fingers and in the keepers E, which

are located intermediate the fingers. These keepers have a portion extended over the cutter-sections and a portion secured to the finger-bar. The end of that portion extended over the cutter is bent down and bears upon said cutter and holds it down upon the cutting-face *d'* of the finger. The portion secured to the finger-bar is expanded laterally, so as to obtain a broad bearing and afford a ready means for firmly securing it in position. A portion, *e*, depending from the rear end of that portion of the keeper extending over the cutter, bears upon said cutter near its rear edge and holds the cutter-bar against vertical displacement. From this it will be seen that the keeper bears upon the cutter at two points—the one in front of the cutter-bar and the other directly over the same. The keepers are arranged relative to the fingers, so that the one or the other will at all times act upon the cutter and hold it down upon the cutting-face of the finger and prevent any vertical play thereof. By this arrangement the cutters will be held close down to the lower side of the cutting-face of the guard or fingers, which face will be kept flat and true much longer than by any means heretofore devised.

These improvements can be applied to any cutting apparatus in common use, and there may be as many of the keepers and guards with the ends of their overhanging portion bent down as occasion may require.

Additional keepers F and F' are provided and located on each side of the keeper E. The keeper F overlaps the rear portion of the cutter-sections, and the keeper F' extends to a point about midway between lines drawn through the ends of the keepers E and F parallel with the rear edge of the cutter-bar. By this arrangement of keepers the cutter-sections will be held down by a pressure exerted from above at the rear and near the front ends of each section and by a pressure intermediate these points. The keeper E is located intermediate between two guard fingers, having the rear ends of the guards bent down, and the bent ends of the guards and the keeper are substantially in line, as shown, so that the cutter-section will be held down at each edge when about to pass from beneath one guard

or when in the act of passing beneath the other guard and moving part way beneath the same, as will be readily appreciated.

Having thus described my invention, what I
5 claim, and desire to secure by Letters Patent,
is—

The combination, with the finger-bar and
the cutter-bar, of the keeper E, fixed to the
10 the front and rear edges thereof, and the keep-

ers F and F', located one upon each side of the keeper E and bearing upon the cutters at different points in the length thereof, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in 15
presence of two witnesses.

WILLIAM S. FOX.

Witnesses:

AMON LEMMON,

GEORGE M. GAULT.