

A. J. B. FOSTER.

HARROW.

No. 186,997

Patented Feb. 6, 1877.

Fig 2

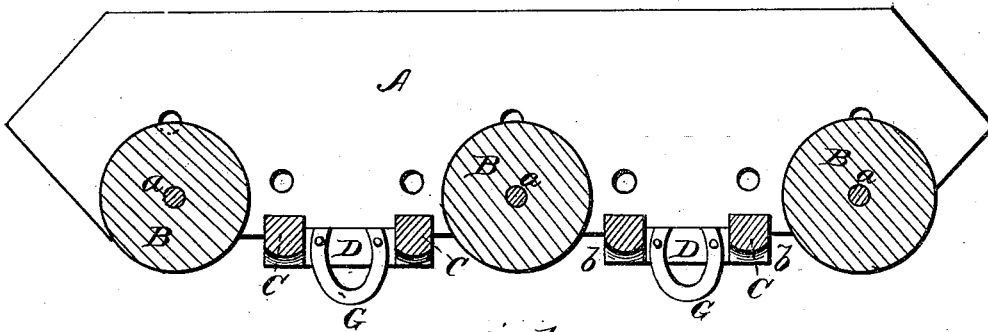
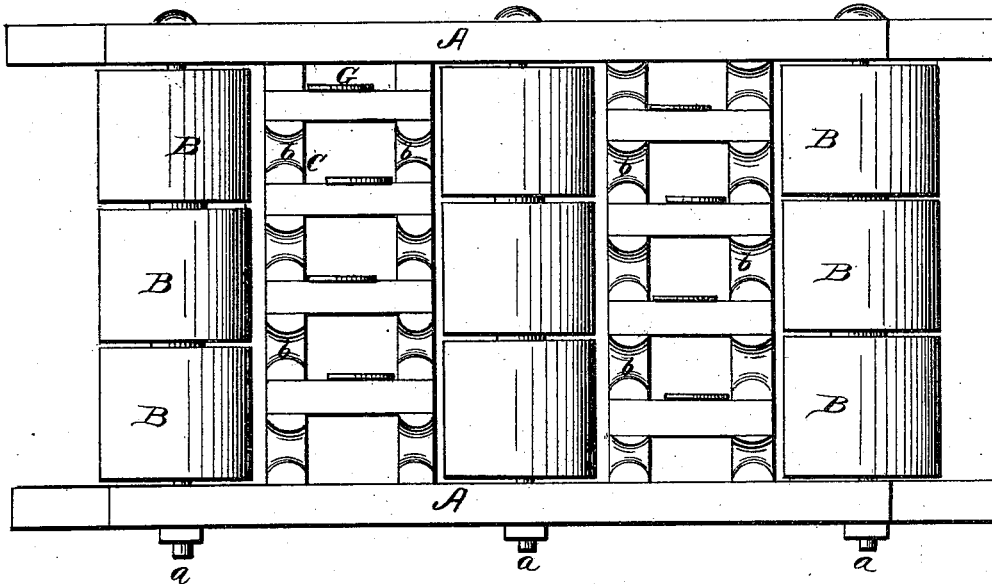


Fig 1



WITNESSES

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# UNITED STATES PATENT OFFICE.

ANDREW J. B. FOSTER, OF MOUNT PLEASANT, TENNESSEE.

## IMPROVEMENT IN HARROWS.

Specification forming part of Letters Patent No. 186,997, dated February 6, 1877; application filed July 12, 1876.

*To all whom it may concern:*

Be it known that I, ANDREW J. B. FOSTER, of Mount Pleasant, in the county of Maury and State of Tennessee, have invented certain new and useful Improvements in Harrow; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form part of this specification.

The nature of my invention consists in the construction and arrangement of a harrow, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a bottom view of my harrow. Fig. 2 is a longitudinal section of the same.

A A represent the two side pieces of my harrow, made of any suitable dimensions. Between these side pieces are three sets of rollers, B B, one set in the center and one near each end. These rollers are placed upon rods *a a* fastened in the side pieces. Each set of rollers may be formed of any number desired, and the rollers should be separated by means of washers, as shown.

In the two spaces between the three sets of rollers are cross-bars C C, placed in the side pieces, two in each space at a suitable distance apart. In each set of these cross-bars are attached longitudinal bars D by bolts, and to each of these bars is fastened a tooth, G. Between the bars D in the under sides of the

cross-bars C are made notches *b* to allow the clods of dirt to pass through.

The teeth G are shaped like a half-moon, and are made of iron of suitable thickness. In a full-sized harrow they are to be placed about six inches apart, crosswise, and so situated as to cause the teeth in the rear to cut between the front teeth.

The rods *a* that carry the rollers B and the cross-bars C are all adjustable in the side pieces A A, by means of holes therein, for the purpose of regulating the depth at which the teeth are to work.

Scrapers may also be attached in the side pieces for keeping the rollers clean, if needed.

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

1. In a harrow, the combination of the adjustable cross-bars C C, the bars D D, connecting the same, and the half-moon-shaped harrow-teeth G, secured to the bars D, substantially as herein set forth.

2. The combination of the side pieces A A, the three sets of rollers B placed upon adjustable rods *a*, the adjustable cross-bars C, connecting-bars D, and teeth G, all constructed substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

A. J. B. FOSTER.

Witnesses:

W. G. J. HUNTER,  
H. W. WEEDIN.