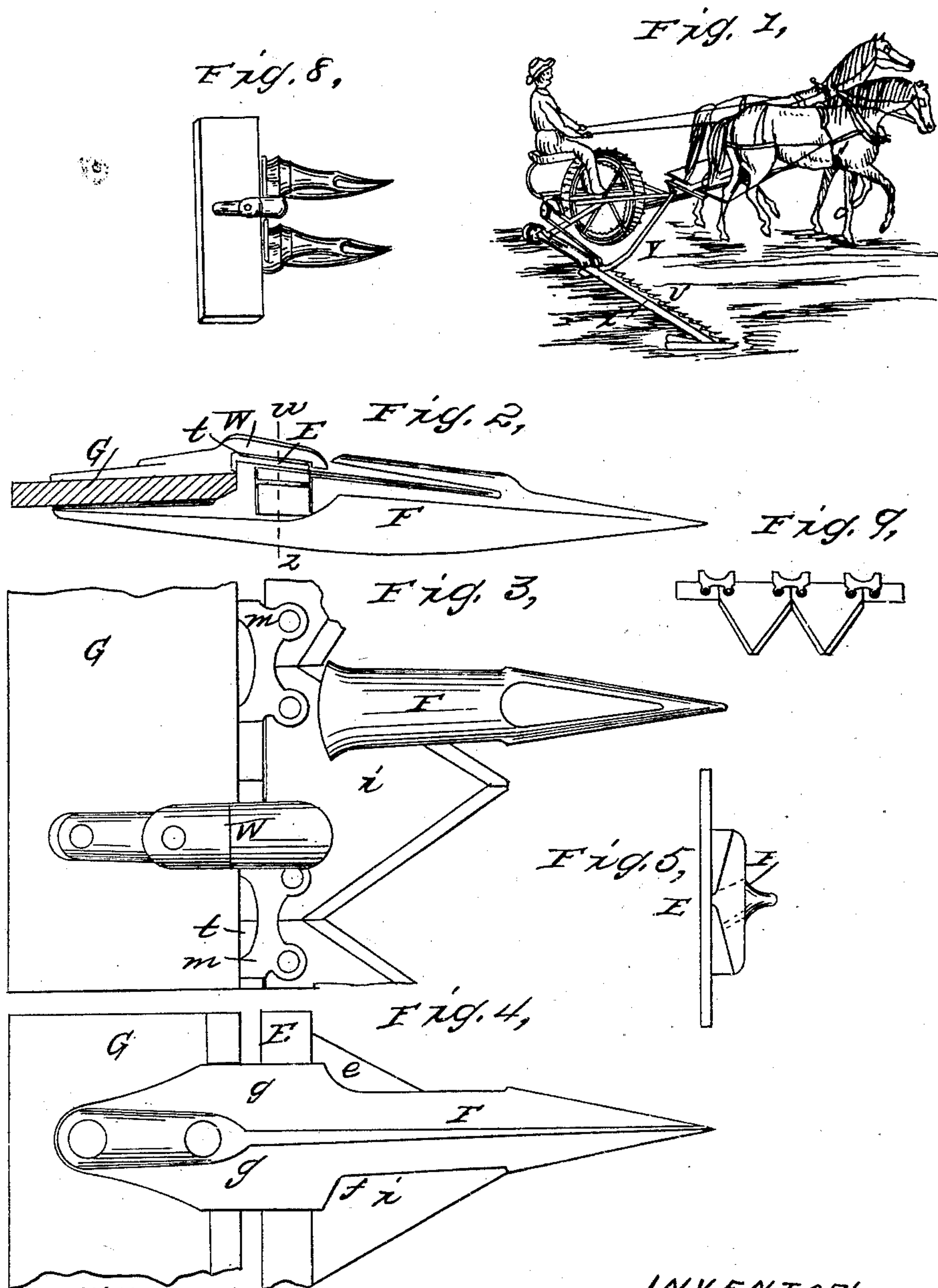


M. HALLENBECK.

Harvester.

No. 20,272.

Patented May 18, 1858.



WITNESSES:

*Richd. L. Smith*  
*Abraham N. Smith*

INVENTOR:

*Martin Hallenbeck*

# UNITED STATES PATENT OFFICE.

M. HALLENBECK, OF ALBANY, NEW YORK.

## IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. 20,272, dated May 18, 1858.

*To all whom it may concern:*

Be it known that I, MARTIN HALLENBECK, of the city of Albany, State of New York, have invented certain Improvements in the Construction of Grain or Grass Harvesters; and I declare the following specification, with the drawings hereto annexed, as part thereof, to be a full and perfect description thereof.

Figure 1 is a perspective view of the entire machine. Fig. 2 is a profile sectional view of the cutting apparatus, taken at *x v*, Fig. 1. Fig. 3 is a plan of a part of the heel-bar with a finger, cutter, cutter-bar, and guide-cap. Fig. 4 is a reverse plan of part of heel-bar with finger and cutter-bar; Fig. 5, a cross-section in direction of *w z*, Fig. 2; Fig. 8, a perspective of Fig. 2 with the cutter-bar and knives removed. Fig. 9 is a plan of the cutter-bar with knives and coupling slides.

Similar letters in the different figures denote the same parts of the machine.

In the usual construction of harvesting-machines the upper surface of the sickle-teeth or cutters *i* range on a level with or below the top of the heel-bar *G*, and the cutters are held down in place while operating in such way that portions of the cut grass, by getting in between the cutters and the apparatus which holds it down, obstruct the machine. In order to obviate this difficulty, I attach the cutters to their bar *E* so that their back edges shall range with that of the bar. The bar *E* traverses in a groove separated from the heel-bar *G* by a flange of metal, *t*, which rises as high as the upper surface of the cutter.

To the top of the cutters coupling-slides *m* are attached, serving the purpose of fastening the knives or cutters to the bar and to each other, and strengthening the cutters. They also, by their projection backward beyond the edge of the cutters, support the bar with cutters upon the upper surfaces of *t t*, along which they slide when operating.

To keep the cutters from rising off from *t t*, guide-caps *W*, made as shown in the drawings, with recesses to pass the coupling-slides, have their front edges fitted to lie near the surface of the cutters.

It will be seen upon an examination of the drawings that whenever (which frequently occurs) portions of the cut grass get in between the back of the cutters and the heel-bar *G* the coupling-bars *m* will remove them out of the way from under the guide-caps *W* into the spaces left between the metal flanges *t t*, this being an important function of the slides *m*.

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

1. The coupling-bars *m*, as described and for the purposes set forth.
2. The cutters fitted to move above the level of the heel-bar, in combination with the separate guide-caps and coupling-bars.
3. The above improvements, substantially as described, and for the purposes set forth in the above specification.

MARTIN HALLENBECK.

Witnesses:

RICHD. VARICK DE WITT,  
ABRAHAM V. DE WITT.