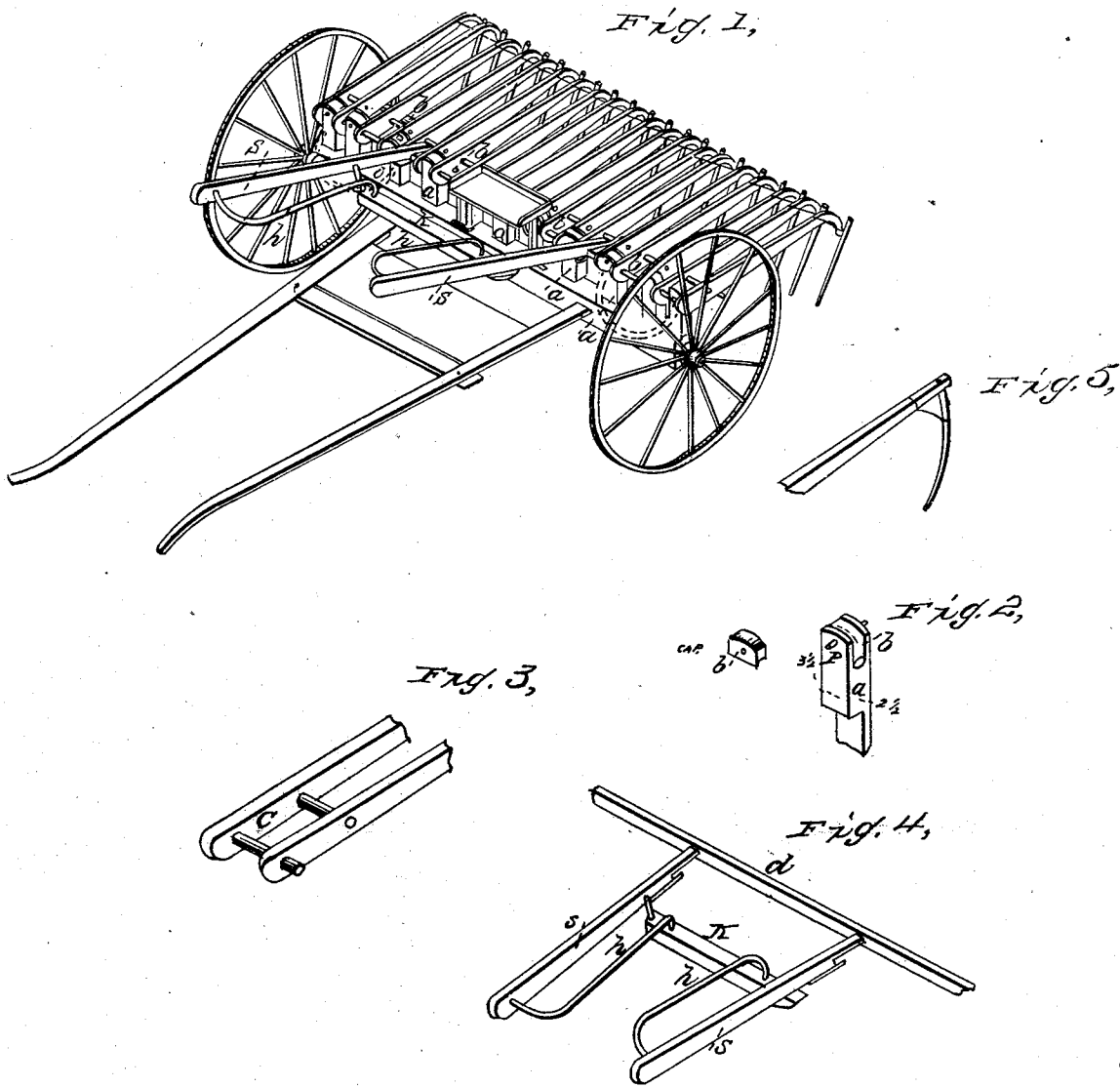


L. BEACH.

Horse Rake.

No. 27,771.

Patented April 10, 1860.



SCALE
INCHES 1 2 3 4 5 6 7 8

Witnesses:
Charles H. Hony
J. H. Hony

Inventor:
Lorenzo Beach

UNITED STATES PATENT OFFICE.

LORENZO BEACH, OF MONTROSE, PENNSYLVANIA.

IMPROVEMENT IN HORSE-RAKES.

Specification forming part of Letters Patent No. 27,771, dated April 10, 1860.

To all whom it may concern:

Be it known that I, LORENZO BEACH, of Montrose, in the county of Susquehanna, in the State of Pennsylvania, have invented a new and Improved Horse-Rake; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 is an isometrical perspective view.

Fig. 2 is an enlarged view of the block that supports the arms and teeth, with the cap *b*, which is made to fit in the top to hold the arms in their place.

Fig. 3 shows an enlarged view of the teeth-arms, which are fastened together in pairs by rounds of wood, the upper round projecting on each side, so as to fit into the top of the blocks *a a a* in Fig. 1. *t t* are semicircular rests for the four outside teeth-arms when thrown up, by which arrangement the rake may be made narrower in passing between roots or other obstructions which would be likely to break the teeth.

Fig. 4 shows the lever by which the teeth

are raised; *h h*, the handles, made of hard wood rounded and bent, as shown in the drawings; *k*, a balance, made of hard wood and attached by the pins *o o* to the levers *s s*.

Fig. 5 shows a straight arm and bent tooth, which can be used instead of the bent arms and straight teeth.

The coupling together of the teeth-arms by wooden pins obviates the necessity of using iron rods, which are liable to rust and make it difficult to take the teeth-arms out for repairs.

By removing the cap *b*, Fig. 2, from the block *a*, which can be done by driving out the pin *p*, either pair of the teeth-arms can be quickly taken out for repairs.

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

The arrangement of the teeth-arms *c*, the pivot-pins *w*, blocks *a*, semicircular rests *t*, lever *s d*, handles *h*, and balance *k*, as described, for the purposes specified.

LORENZO BEACH.

Witnesses:

CHARLES AVERY,
N. C. WARNER.