

Wheel Cultivator.

Patented Dec. 8, 1868.

Fig. 1.

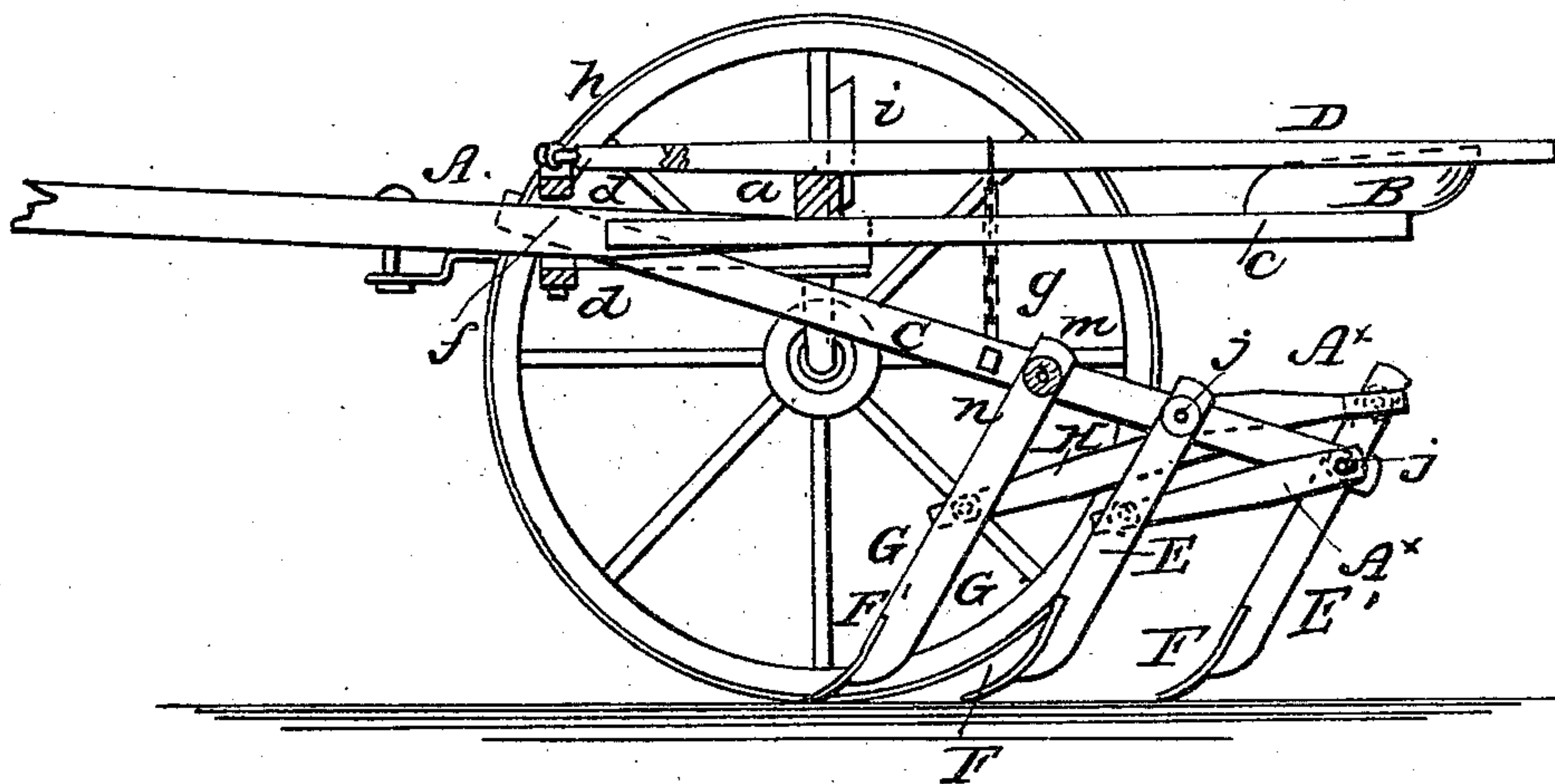
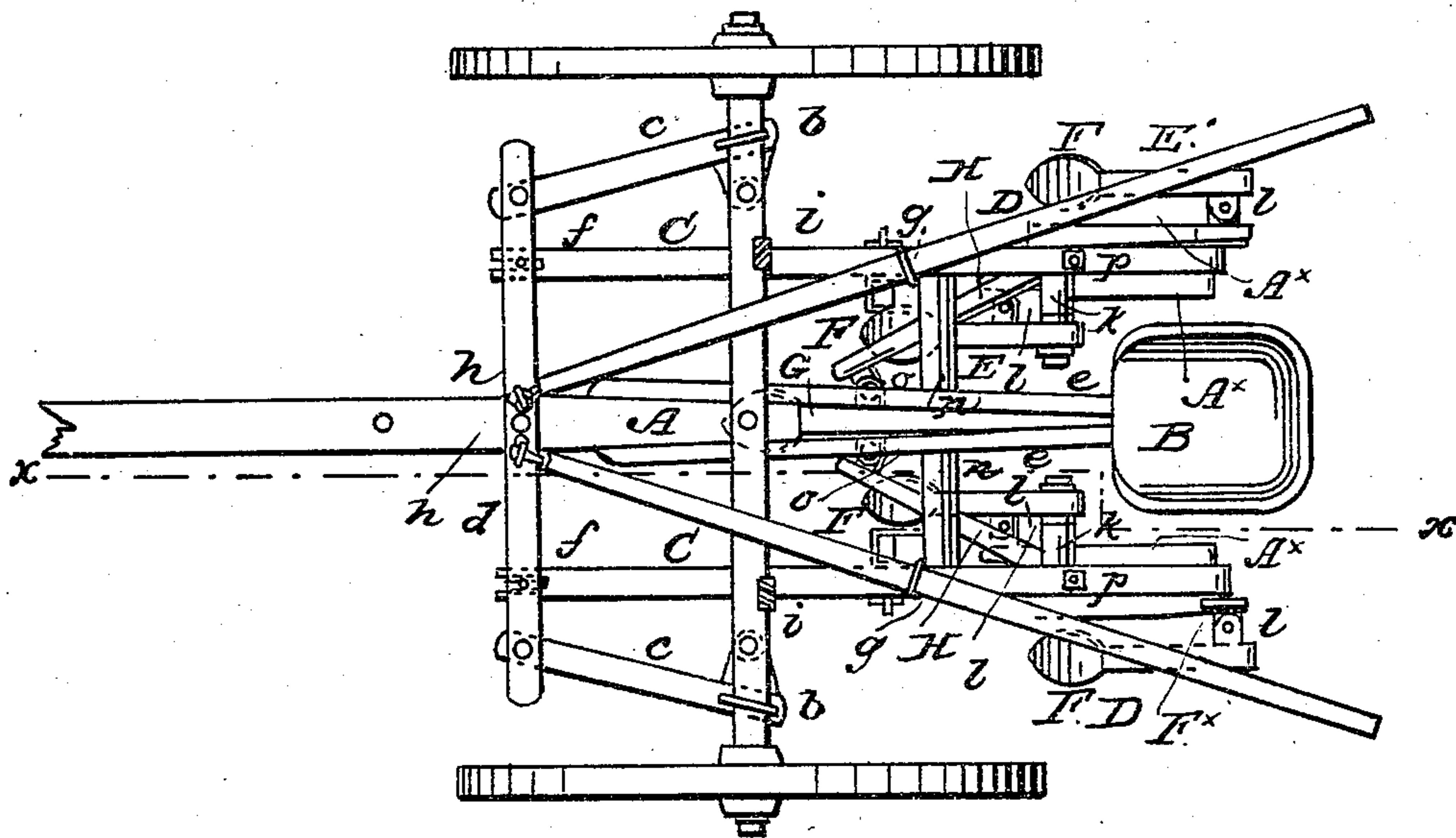


Fig. 2



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Letters Patent No. 84,776, dated December 8, 1868.

IMPROVEMENT IN CULTIVATORS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, GARLAND B. ST. JOHN, of Brooklyn, in the county of Jackson, and State of Michigan, have invented a new and improved Sulky-Cultivator; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and improved means for regulating the depth of the penetration of the shovels in the earth, and also for raising the same, in order to clear obstructions; and also in an improved way of bracing the standards, so as to prevent the same from clogging or choking up with weeds, trash, &c., and preserve them from lateral strain.

The object of the invention is to obtain a sulky-cultivator which will possess the advantages above stated, together with simplicity and economy in construction, durability, and ease of draught.

In the accompanying sheet of drawings—

Figure 1 is a side sectional view of my invention, taken in the line *x x*, fig. 2.

Figure 2, a plan or top view of the same.

Similar letters of reference indicate corresponding parts.

The central beam A of the frame of the machine constitutes the rear part of the draught-pole, and the rear bar *a*, of the frame, is attached centrally to the rear end of A, and is secured at each end, by clips *b b*, to the rear ends of oblique bars *c c*, which form the side pieces of the frame, the front of the frame being composed of two bars, *d d*, placed one above the other, and bolted to the upper and under side of the beam A, the front ends of the side bars *c c* being secured between them.

B is the driver's seat, which is attached to the outer ends of bars *e e*, the inner ends of the latter being secured to the beam A.

The driver's seat is a considerable distance from the rear of the frame, in order that a proper equipoise may be obtained.

C C represent two plow-beams, the front ends of which are connected, by joints or hinges *f f*, to the front part of the frame, said joints admitting of the plow-beams working up and down.

These plow-beams are connected, by chains *g g*, with levers D D, the front ends of which are connected, by joints *h*, to the front part of the frame; said levers extending back within convenient reach of the driver on seat B.

When these levers are raised so as to rest upon uprights *i i*, on the frame, the plows or shovels will be out of the ground; and the plows or shovels will work in the ground when the levers rest upon the top of the frame.

To each beam C there are attached two standards E E, one standard being in advance of the other, the front standard, E, being at the inner, and the rear standard at the outer side of the beams. (See fig. 2.)

These standards are attached to the beams by bolts *j*, which pass through arms *k*, the latter causing the standards to be at a suitable distance from the beams; and each bolt *j* secures a brace, A^x, to the beams, which braces hold the standards at a greater or less angle of inclination, as may be desired.

The braces are attached to the standards by joints *l*, and by loosening the bolts *j* the braces may be adjusted so as to give the standards the proper degree of inclination.

By this arrangement, the depth of the penetration of the shovels or plows may be regulated as desired, and the standards are well braced, so as to resist lateral strain.

F are the plows or shovels, attached to the lower ends of the stands. They may be constructed in the usual or any proper manner.

G is a standard, which is attached to both plow-beams, by a bolt, *m*, which passes through the arms *n n* and both beams C C, so as to bring said standard at the centre of the machine.

This standard is braced by rods H H, the front ends of which are connected to it by joints *o o*, and the rear ends connected to the under sides of the beams C C, by bolts *p*, which pass through oblong slots in the beams, to admit of the adjustment of the standard to a greater or less angle of inclination, as desired.

The standard G also has a plow or shovel, F', secured to its lower end, and the shovels of the standards E may, by the insertion of bevel washers behind them, be inclined either to the right or left, so as to throw the earth towards or from the growing plants, as required.

There is no opportunity for rubbish to collect and choke up the plows or shovels, owing to free or open space allowed underneath the machine, and the plow-beams are allowed an ample rising and falling movement, so that they may be raised as high as desirable in any instance.

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

The securing of the standard G between the two beams C C, by means of the bolt *m*, arms *n n*, and braces H H, all arranged substantially as and for the purpose set forth.

The above specification of my invention signed by me, this 28th day of April, A. D. 1868.

GARLAND B. ST. JOHN.

Witnesses:

JOHN W. SHARP,
MARY SHARP.