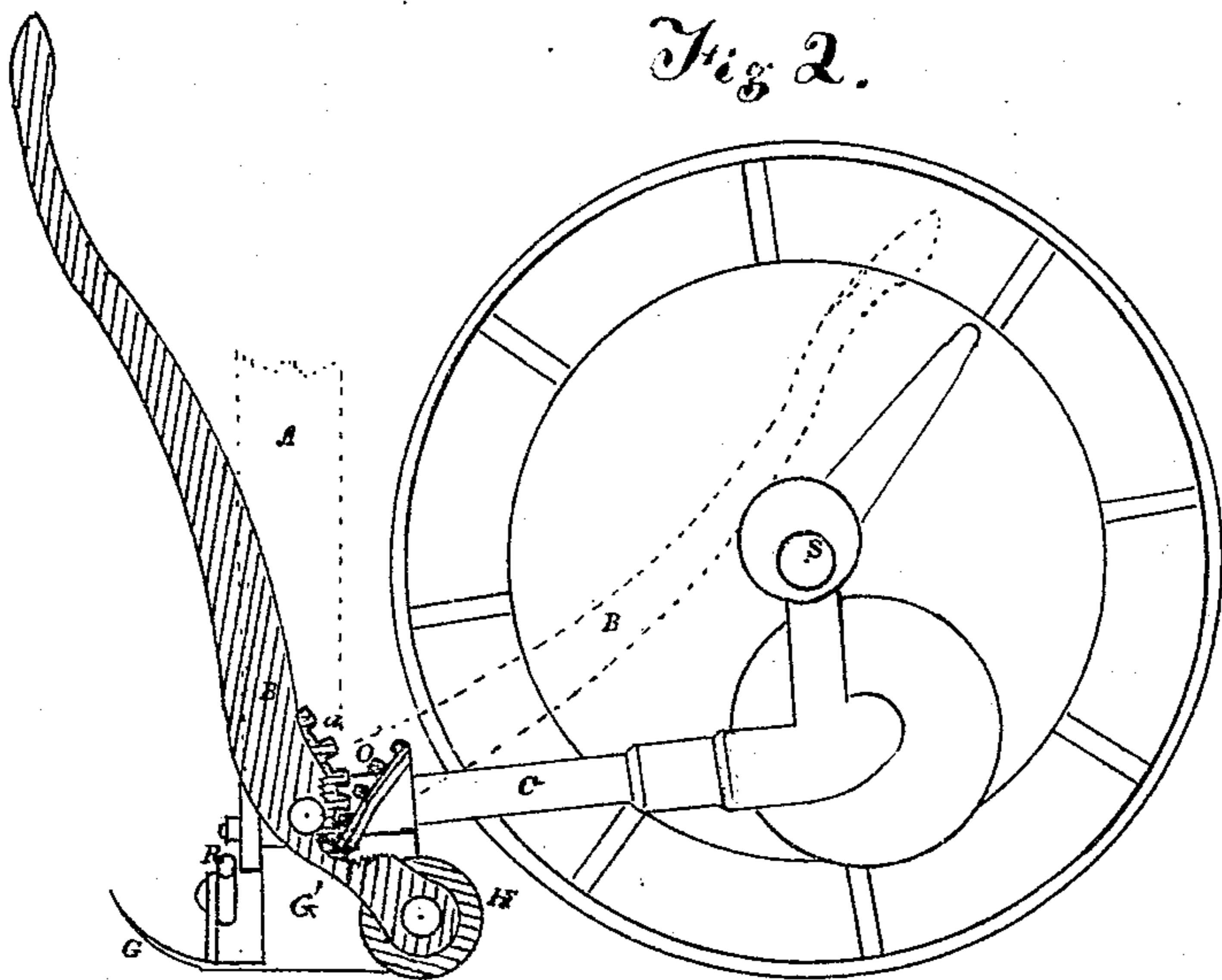
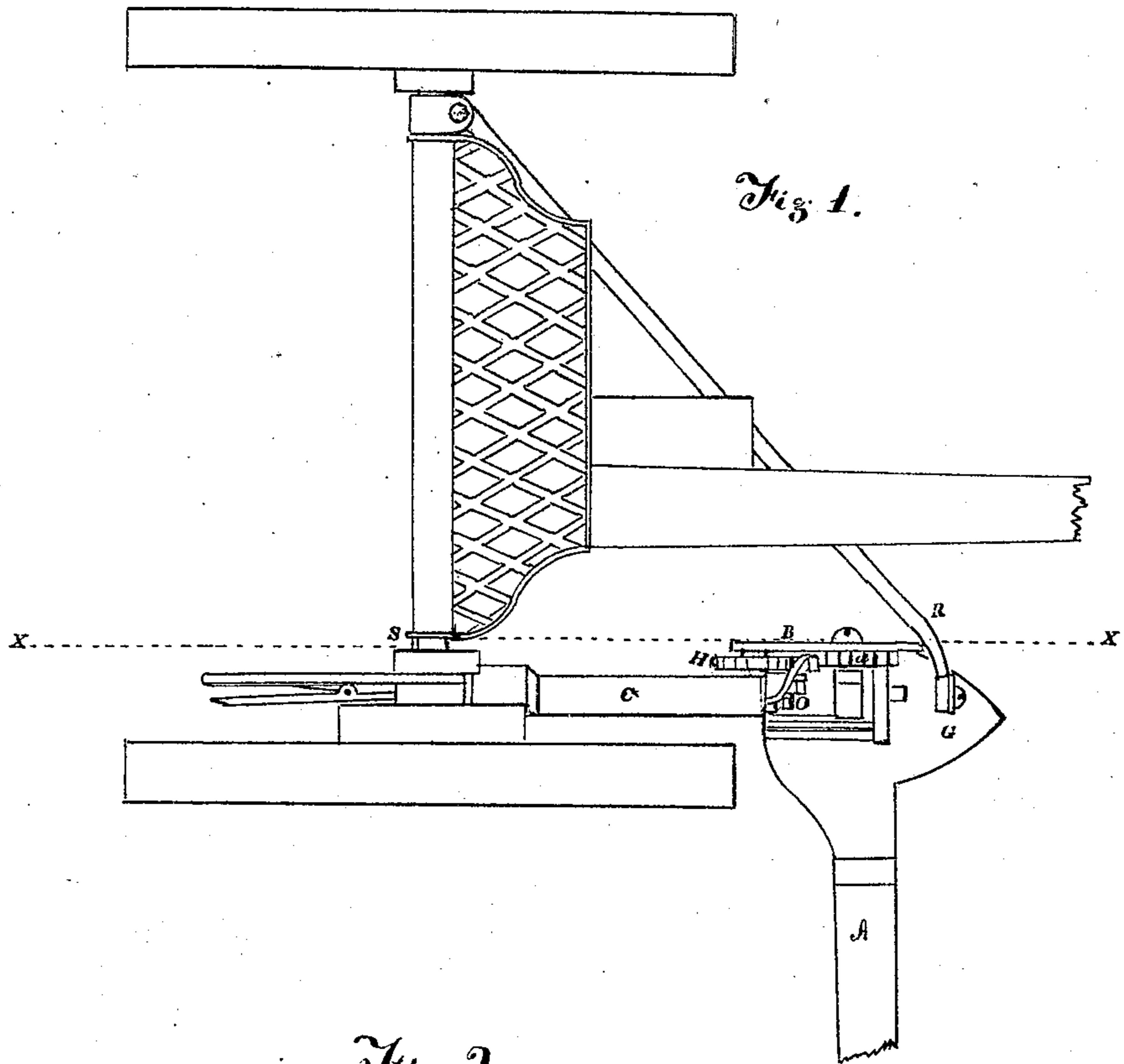


J. G. PERRY.
Improvement in Harvesters.

No. 130,386.

Patented Aug. 13, 1872.



Witnesses
M. F. Perry.
Benjamin Arnold

Scale
0 3 6 9 12 in.

Inventor
John G. Perry

UNITED STATES PATENT OFFICE.

JOHN G. PERRY, OF KINGSTON, RHODE ISLAND.

IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. 130,386, dated August 13, 1872.

Specification describing certain Improvements in Harvesters, invented by JOHN G. PERRY, of Kingston, in the county of Washington and State of Rhode Island.

This invention consists mainly in providing the lifting-lever with gear for raising the outer end of the finger-bar, and a wheel for raising its inner end, as hereinafter described.

Figure 1 is a plan of the machine. Fig. 2 is a vertical section taken through in the direction of the line *x x*, Fig. 1.

C is a barrel that forms a support, bearings, and shield for the crank-shaft. G is the inside shoe. A is the finger-bar, which turns upon a bearing on the forward end of the barrel C and a bolt-pin or pivot in the brace R. A slot is made part way around and through the bearing of said inner shoe to allow a stud or pivot, made fast to said barrel, to project out from it through said slot to receive the raising lever B. An involute section of gear-teeth, *a*, is placed on said lever, close by its pivot. (See Fig. 2, where a part of the lever is removed to show the gearing.) A corresponding number of gear-teeth, *o*, are arranged in a spiral form on the outside surface of the bearing of the inside shoe.

The wheel H runs on the ground, and the two sections of gear-teeth mesh into each other, so that when the raising lever is moved toward the axle S by the combination and joint operation of the wheel and gearing the inside shoe and cutting apparatus the entire length will be raised to any desired horizontal position for cutting, or any height for clearing obstructions, and may rest at a vertical position or over on the pole when not in use. This arrangement of the gearing equal-

izes the leverage over the weight of the cutting apparatus and raises it easier at the first start, where it usually raises the hardest, and is used the most and faster as it rises up, where the resistance is less. The lower part of the lever B is curved backward below the stud or pivot on which it turns. The wheel H is put on a pin at the lower end of the lever B. This wheel, running on the ground while the machine is at work, also takes the weight off the inside shoe when raised from the ground, and also that of the cutting apparatus the entire length, thereby relieving the weight from the pole and team, and lighten the working of the machine very much; and the cutters, being hinged around the crank-shaft, will run at any point, and need not be thrown out of gear when raised. The cutting apparatus will yield and rise over any obstruction passing under it, or by any means lifting at the outer end, or by the track-clearer, as that will move the gear and lever back, it not being necessary to secure it in any way at any particular place, as in other machines.

By adding the ordinary cutters, seat, whiffs, &c., we have a complete mowing-machine. By adding to them the platform, raking attachment, &c., a reaper is produced.

Having thus described my improvement, I claim—

The combination of the lever B, gearing *a*, and wheel H, with the shoe G, substantially as described, and for the purposes set forth.

JOHN G. PERRY.

Witnesses:

S. EMILY PERRY,
BENJAMIN ARNOLD.