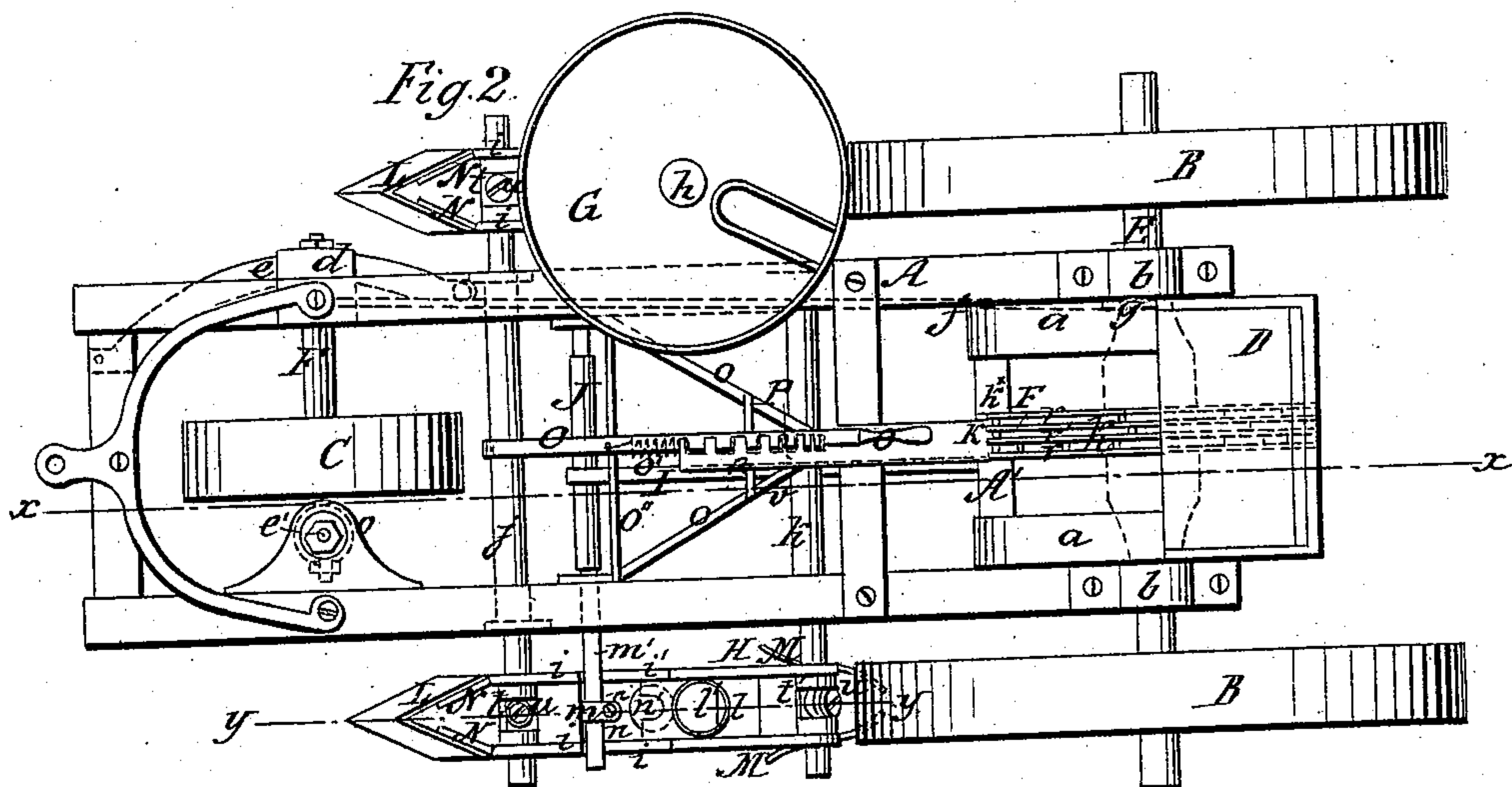
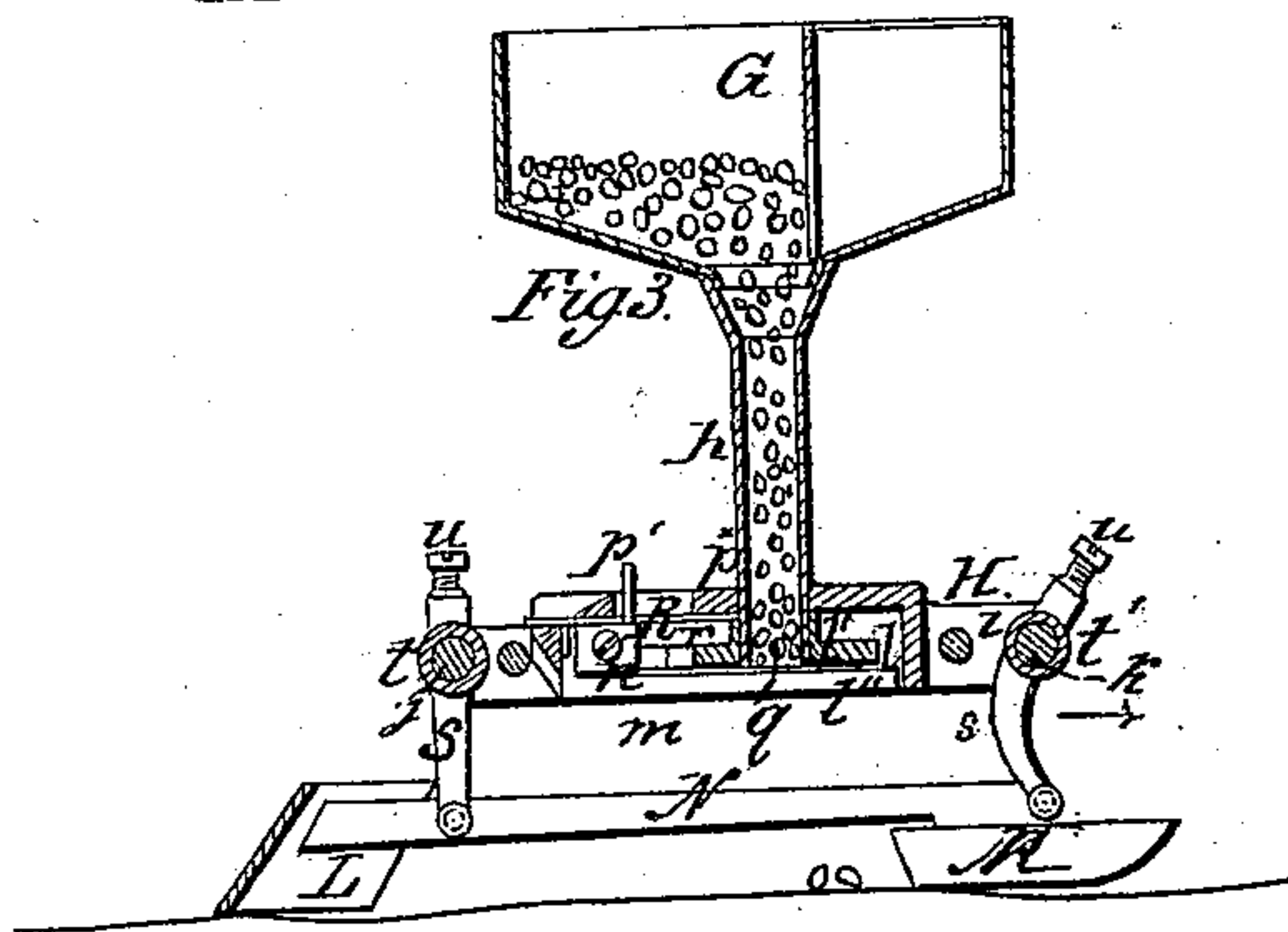
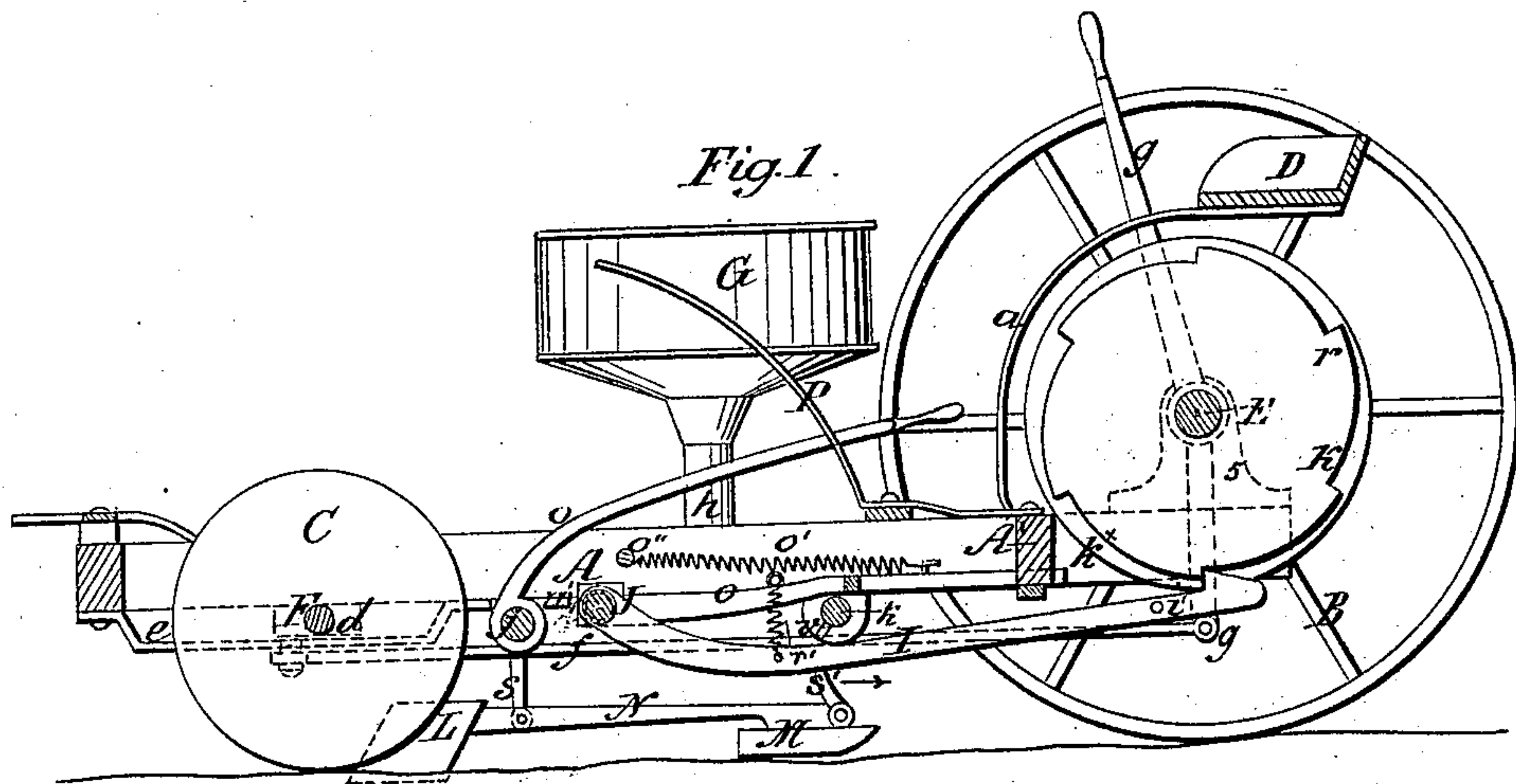


J. C. STODDARD.

Potato-Planter.

No 24,065

Patented May 17, 1859.



Witnesses:
J. W. Coombs
B. W. Hauff.

Inventor:
J. C. Stoddard

UNITED STATES PATENT OFFICE.

J. C. STODDARD, OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN POTATO-PLANTERS.

Specification forming part of Letters Patent No. 24,065, dated May 17, 1859.

To all whom it may concern:

Be it known that I, J. C. STODDARD, of Worcester, in the county of Worcester and State of Massachusetts, have invented a new and Improved Potato-Planter; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a longitudinal vertical section of a potato-planter constructed according to my invention, the line *xx* in Fig. 2 indicating the plane of section. Fig. 2 is a plan or top view of the same, the upper portion of the dropping apparatus on one side of the machine being removed so as to expose the parts below the same. Fig. 3 is a longitudinal vertical section of the dropping apparatus, the line *yy* in Fig. 2 indicating the plane of section.

Similar letters of reference indicate corresponding parts of my machine in the several figures.

To enable those skilled in the art to fully understand, construct, and use my potato-planter, I will proceed to describe its construction and operation.

A frame, A, of rectangular or any other convenient form, rests on the two hind wheels, B B, and on the fore wheel, C, and between the two hind wheels and supported by the arms *a* is the driver's seat D. The axle E of the wheels B has its bearings in the standards *b*, and these wheels are attached to their axle by means of set-screws, so that their distance apart may be varied at pleasure. The axle F of the fore wheel has its bearing on one side in the swivel-head *c*, which turns on a pivot, *c'*, and on the other side in the sliding head *d*, which slides between the frame A and a supporting-plate, *e*, firmly secured to the frame, and the sliding head *d* connects by means of a rod, *f*, with a lever, *g*, which has its fulcrum on the axle E, and which can be operated from the driver's seat. This lever serves to steer the machine, as by changing its position the direction of the fore wheel is changed, so that the machine can be made to follow a straight line or to turn in a curve at the will of the driver.

Arranged on each side of the frame A is a hopper-box, G, from which a tube, *h*, leads to the dropping apparatus H. This apparatus is arranged between two sliding plates, *i*, which

slip over two parallel arbors, *j* and *k*, and which are united by a platform, *l*, which forms a socket, *l'*, for the discharge-tube *h*. Close under this platform, and rigidly attached to a head, *m*, is the slide *n*, which moves between the platform *l* and between two guides, *l''*, (see Fig. 3,) which are attached to the lower parts of the plates *i*, and the slide *n* is provided with an opening, *n'*, which, when brought to correspond with the mouth of the discharge-tube *h*, gives the potatoes a chance to drop. The head *m* is attached to a rod, *m'*, which is supported by the plates *i*, and which is so arranged that it slides backward and forward in recesses *i'* in the upper edges of these plates, and it is guided in its motion by an arm, *o*, which passes through a mortise in the lower part of the cross-beam A', as clearly represented in Fig. 1, and hitched to this arm is a spiral spring, *o'*, one end of which is fastened to a rod, *o''*, which is rigidly attached to the frame A, so that by the action of this spring the slide *n* is brought in such a position that the mouth of the discharge-tube is closed.

In order to measure the quantity of potatoes deposited by each stroke of the slide *n*, a cutter, *p*, is placed over a pivot, *p'*, which extends from the upper part of the head *m*, and the cutter is guided in its motion between the top-plate *p** of the dropping apparatus H and a guide, *p''*, which is attached to this top, and a slot, *q*, in the lower part of the discharge-tube gives room to the cutter to enter the same and cut off the communication between the upper portion of the discharge-tube and its mouth. Motion is imparted to the rod *m'*, together with the head *m*, by means of a hook-lever, I, which is attached to a sleeve, J, which slides on the rod *m'*, and the lever I is agitated by a compound cam, K, which is rigidly attached to the axle E of the driving-wheels B, and which consists of three or more different sets of cams, the first set, *r*, serving to plant the potatoes in hills three feet apart, the second set, *r'*, in hills two and a half feet apart, and the third set, *r''*, in drills. By sliding the sleeve J on the rod *m'* the lever I may be brought to engage with any one of the three sets *r*, *r'*, or *r''*, and a spiral spring, *r**, which is attached to the arm *o* and to the lever I, serves to keep the hooked end of the latter in contact with the cams, and a pin, *i**, which is fastened near to the hooked end of the lever I, by coming in contact with

the flanges k^* of the cam K, serves to throw the hook out of gear with the cams.

The plowshares L and the covering-shares M are attached to bars N, which are pivoted to arms s and s' , and these arms are attached to small tubes t and t' , which are secured to the shafts j and k between the plates i by means of set-screws u , which serve at the same time to confine the dropping apparatus at the required distance from the frame A, and secured to the shaft j is the hand-lever O, which works over a serrated arc, P, and by turning this lever the plowshares, together with the covering-shares, can be raised or lowered at pleasure. By raising the lever O the arms s and s' turn in the direction of the arrows, Figs. 1 and 3, and the shares are raised and a nose, v , attached to the shaft k , comes in contact with a hooked lever, I, whenever the hand-lever O is raised far enough, and by the time the shares L and M are raised clear from the ground the hooked end of the lever I is thrown out of gear with the cam K, and the machine can be drawn from place to place without operating the working parts of the same.

The operation is as follows: In order to bring the machine to the required spot, the shares L and M are raised from the ground, and at the same time the lever I is thrown out of gear with the cam K by the action of the lever O. When arrived on the proper place the depth to which the plowshares are to cut is determined by depressing the hand-lever O more or less, and the lever I is shifted to that part of the cam which

gives the required distance apart to the hills or to the last set of cams, r'' , when the potatoes are to be planted in drills, and the width of the furrows or the distance between the hills or drills in a transverse direction is determined by shifting each dropping apparatus to or from the frame A, and the driving-wheels B are secured right behind the centers of the shares L and M, and the machine is now started. By the action of the cam K on the lever I the slide n , together with the cutter p , is drawn in, so that the cutter closes the communication of the hopper-box G with its mouth and the potatoes contained between the slot q in the lower part of the discharge-tube h and the slide n are discharged through the opening w' in the slide in the furrows made by the shares L and covered up by the covering-shares M.

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

1. The combination of the compound cam K, hooked lever I, and sliding cross-head o , with cutter p , attached, the whole arranged and operating substantially as and for the purpose herein shown and described.

2. Arranging the plowshare L and covering-shares M on parallel rock-shafts j k , so that a lateral and vertical adjustment can be given to the same, substantially as herein set forth.

J. C. STODDARD.

Witnesses:

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J. W. COOMBS.