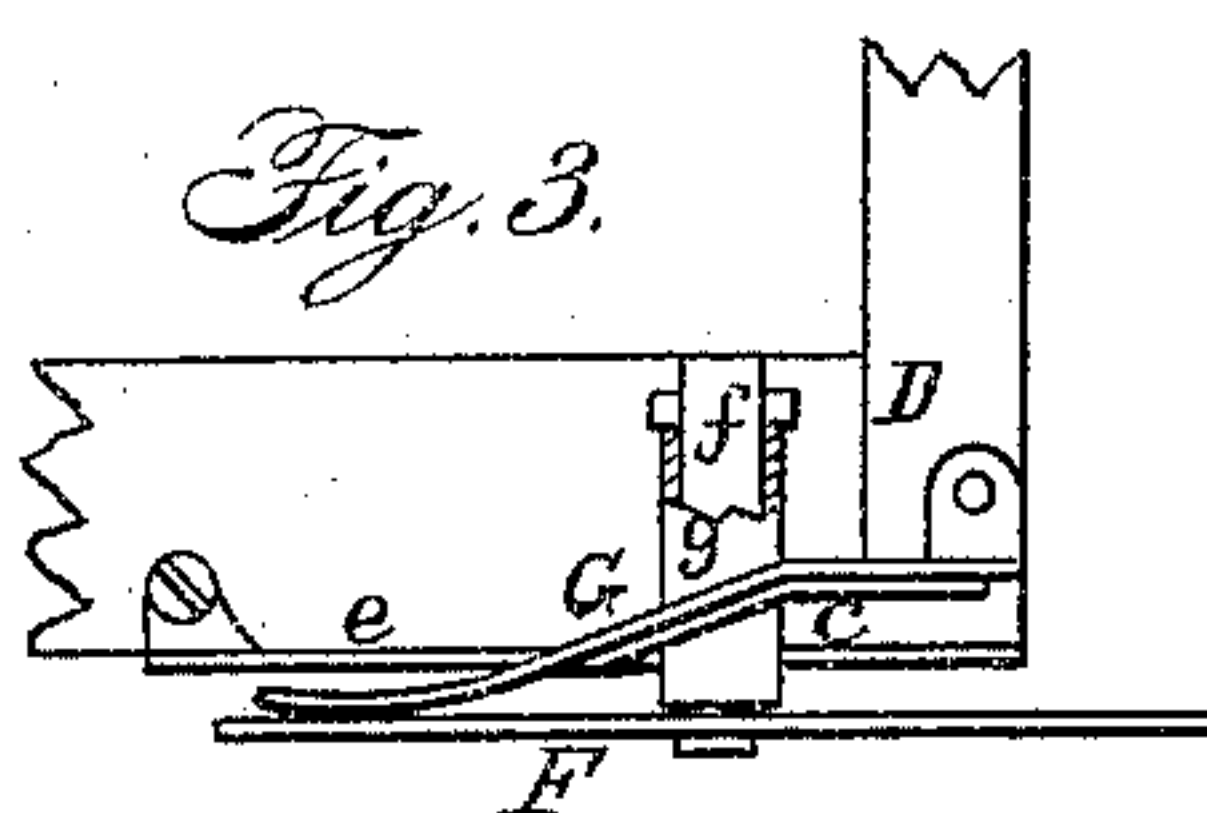
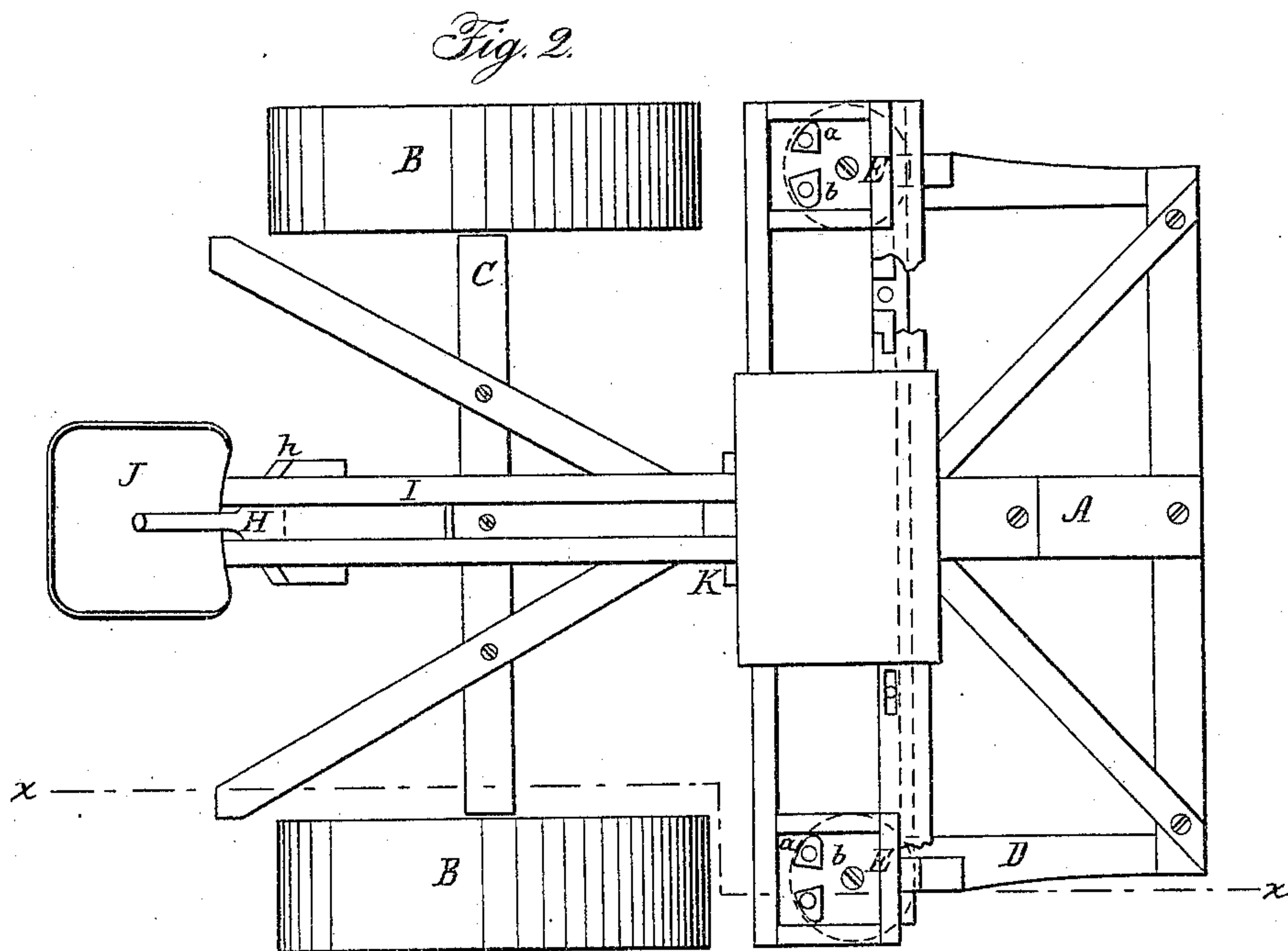
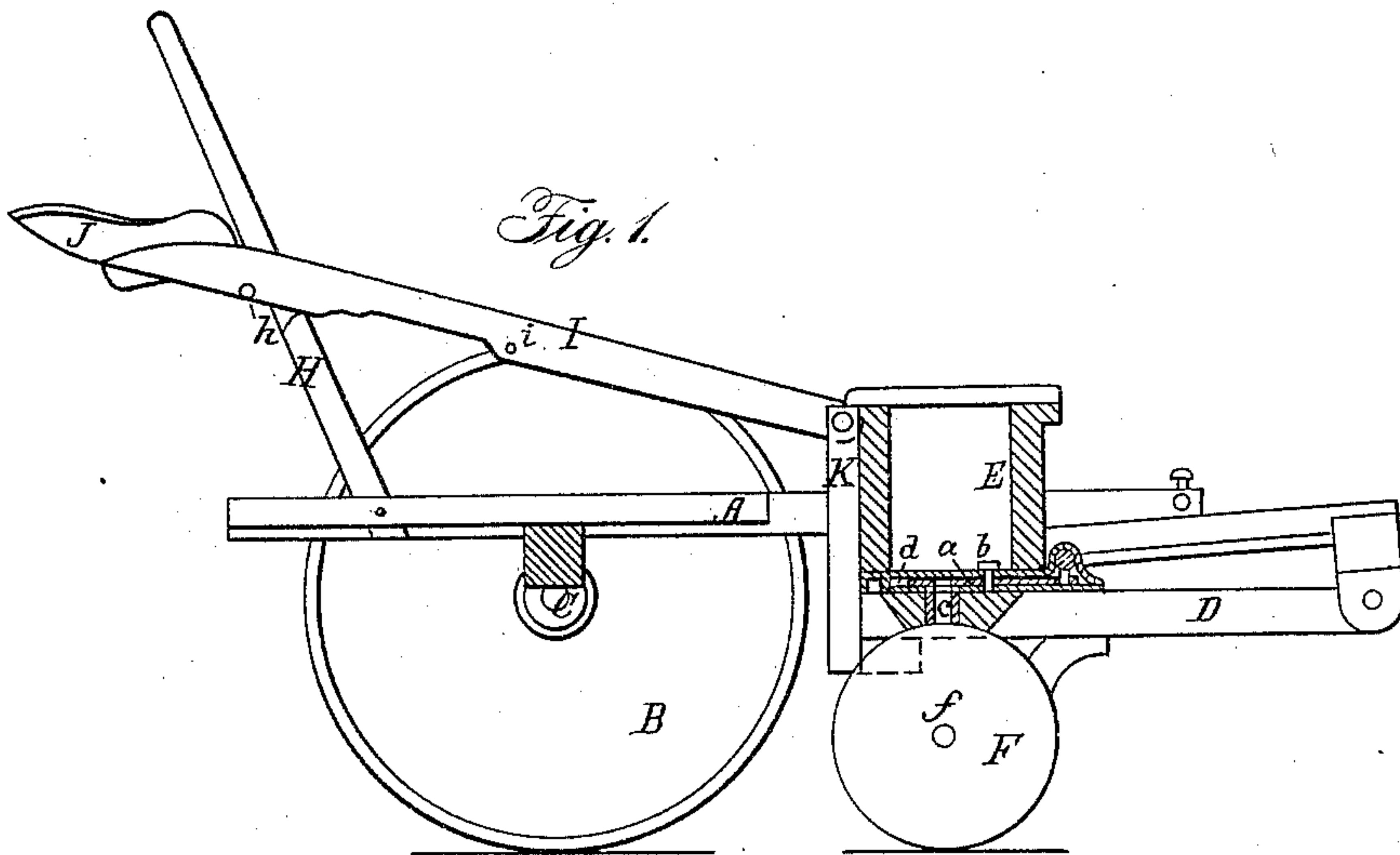


G. D. HAWORTH.

Corn-Planter.

No. 44,725.

Patented Oct 18, 1864.



Witnesses:

J. W. Coombs
Geo. W. Reed

Inventor:

G. D. Haworth
per Munn & Co
attys

UNITED STATES PATENT OFFICE.

G. D. HAWORTH, OF SPRINGFIELD, ILLINOIS.

CORN-PLANTER.

Specification forming part of Letters Patent No. 44,725, dated October 18, 1864.

To all whom it may concern:

Be it known that I, G. D. HAWORTH, of Springfield, in the county of Sangamon and State of Illinois, have invented a new and Improved Corn-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 a part of this specification, in which—

Figure 1 represents a longitudinal vertical section of my invention, the line *x x*, Fig. 2, indicating the plane of section. Fig. 2 is a plan or top view of the same. Fig. 3 is an inverted plan of the colter and mold-board detached.

Similar letters of reference in the three views indicate corresponding parts.

This invention relates to certain improvements in the apparatus for opening the furrows and for depositing the seed, and also in the peculiar construction of the frame, whereby the driver is enabled to control the position of the furrowing device in an easy and simple manner.

The nature of my invention and its peculiar advantages will be fully understood from the following description.

A represents the main frame, which is provided with two wheels, B, attached to the ends of the axle C.

The secondary frame D is hinged to the front cross-bar of the main frame, and it supports the hopper-boxes E and the mechanism for distributing the seed and for opening the furrows which are intended to receive the seed. The seed is discharged from the hoppers by the action of oscillating plates *a*, which work under the perforated bottoms *b* of the hoppers and drop the seed into tubes *c*, which conduct the same to the furrows. A space, *d*, at the inner edges of the oscillating plates *a* prevents the accumulation of chaff and allows the same to pass out freely from below the plates. The furrows are opened by the action of a revolving colter, F, and curved mold-board G. Each of the mold-boards is attached to the lower end of one of the tubes *c*, and it is steadied by a brace, *e*, and the distance of its rear edge from the revolving colter determines the width of the furrow. The front edge of the mold-board is curved down close to the inner surface of the colter, so that it acts as a scraper, keeping the colter clean and preventing dirt or straw or other impediments from accumulating at and clogging up the mouth of the tube.

The colters F are provided with axles *f*, which are firmly fastened in their centers, and have bearings in stationary boxes *g*, secured to the braces *e* and tubes *c*. By making the boxes *g* stationary the accumulation of trash about the hub and the clogging of the colter is prevented.

The position of the colters F and the depth to which they cut in the ground are determined by a hand-lever, H, which supports the arms I, to the ends of which the driver's seat J is firmly attached. The lever H is pivoted to the longitudinal center beam or reach of the main frame A, and it extends up through a slot between the arms I. These arms are hinged to standards K, which are firmly attached to the rear cross-bar of the secondary frame D, and they rest on a shoulder, *h*, of the hand-lever H, as clearly shown in Fig. 1 of the drawings. By moving said hand-lever toward the driver's seat the weight of the driver acts almost entirely upon the covering-wheels B, and the colters are exposed to the action of nearly the full weight of the rear portion of the secondary frame and its attachments. By moving the hand-lever forward in the direction of the arrow marked near it in Fig. 1 the weight of the driver is made to balance more and more the weight of the rear part of the secondary frame, and the depth to which the colters cut into the ground is gradually diminished, and if the lever is moved forward until it strikes the stop *i* the colters are thrown entirely out of the ground.

My corn-planter is very simple. It is durable, and it can be governed by the driver in the most convenient manner.

The lever H, in its forward position, bears rigidly on the main frame A. By this device the horses' necks may be relieved from undue pressure and the weight of the attendant supported directly on the rotary colters. The latter act in combination with the mold-boards to open the furrows, and the seed is discharged freely in a vertical direction.

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

The relative arrangement of the rotary colters F, curved mold-boards G, hoppers E, dropping mechanism *a b c*, and driver's seat W, substantially as herein shown and described.

G. D. HAWORTH.

Witnesses:

JOHN C. LUMLE,
R. CHURCHILL.