

No. 686,943.

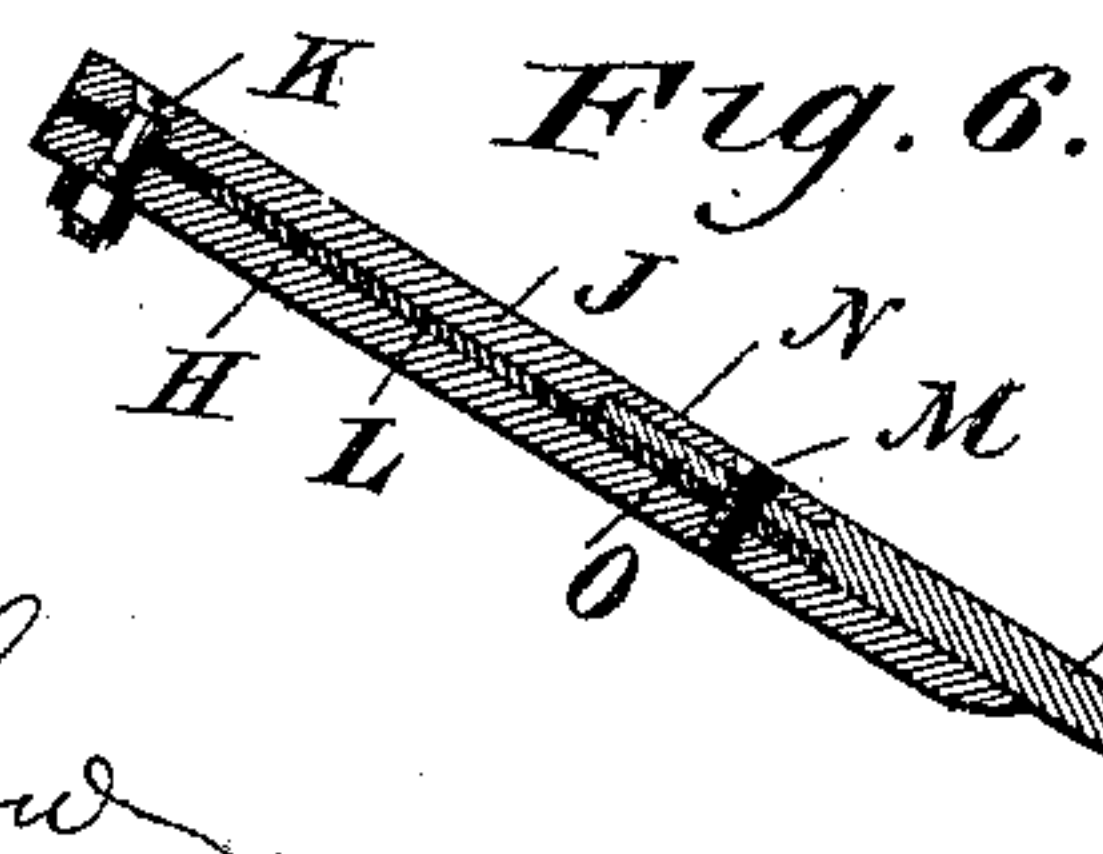
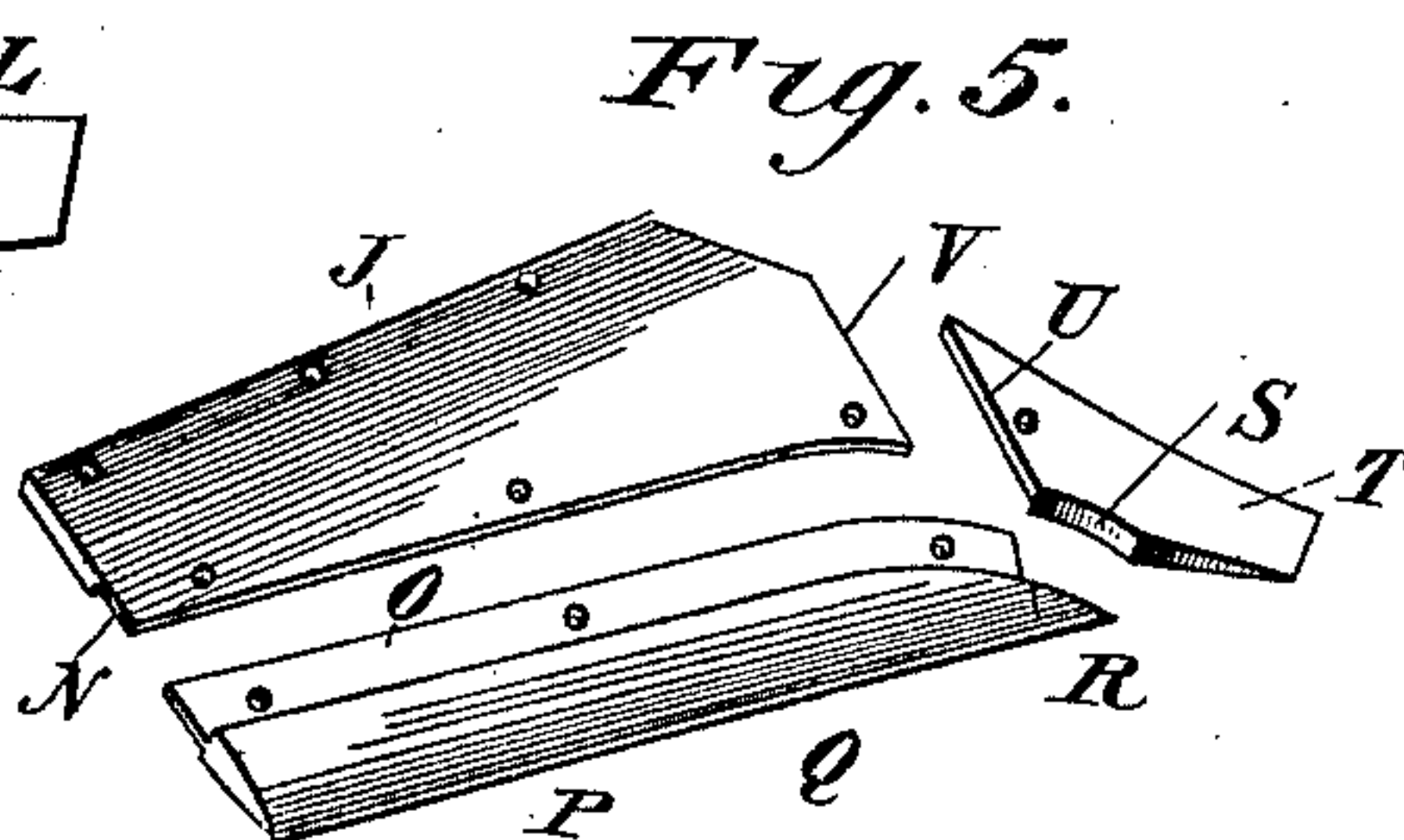
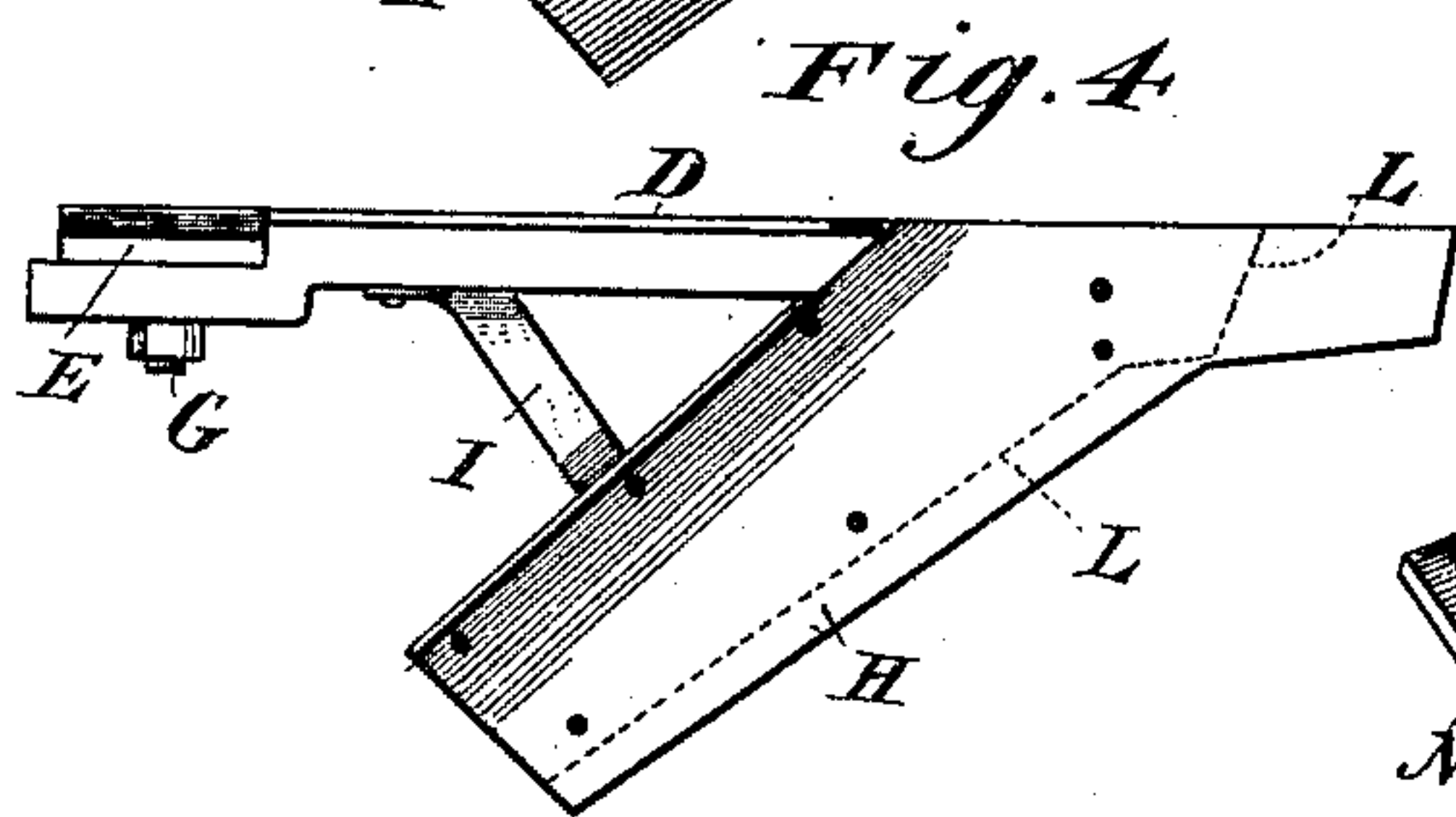
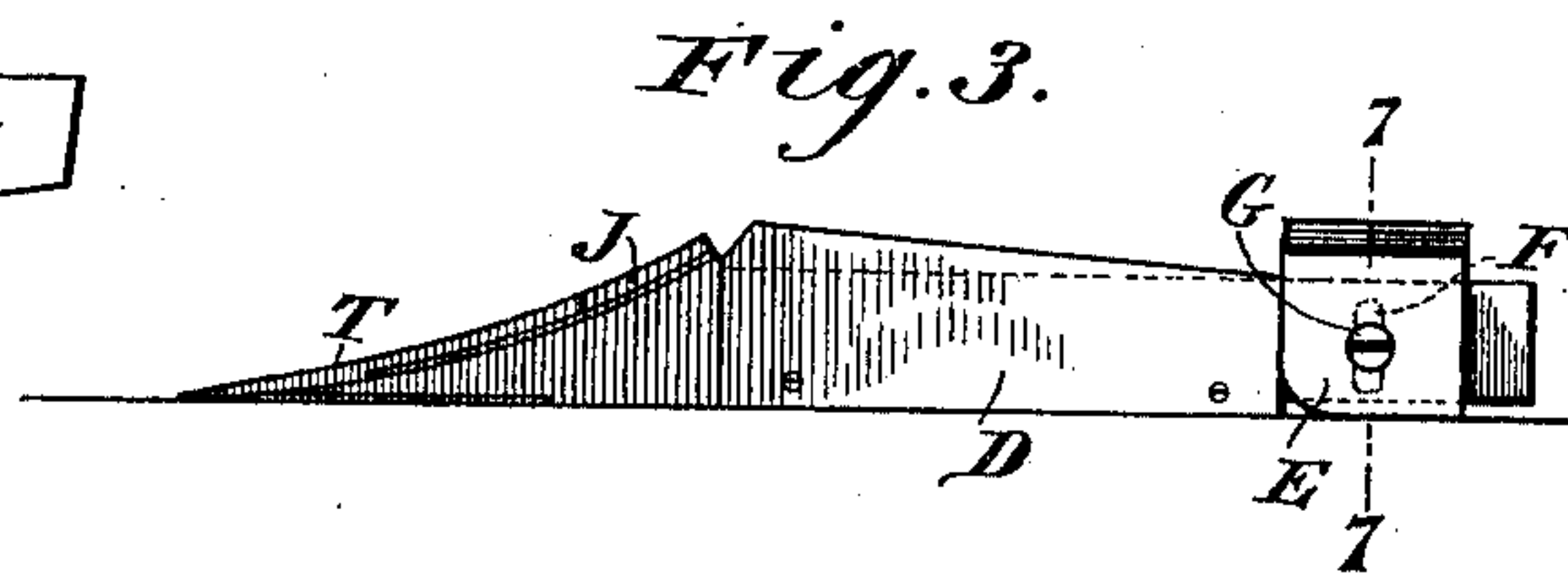
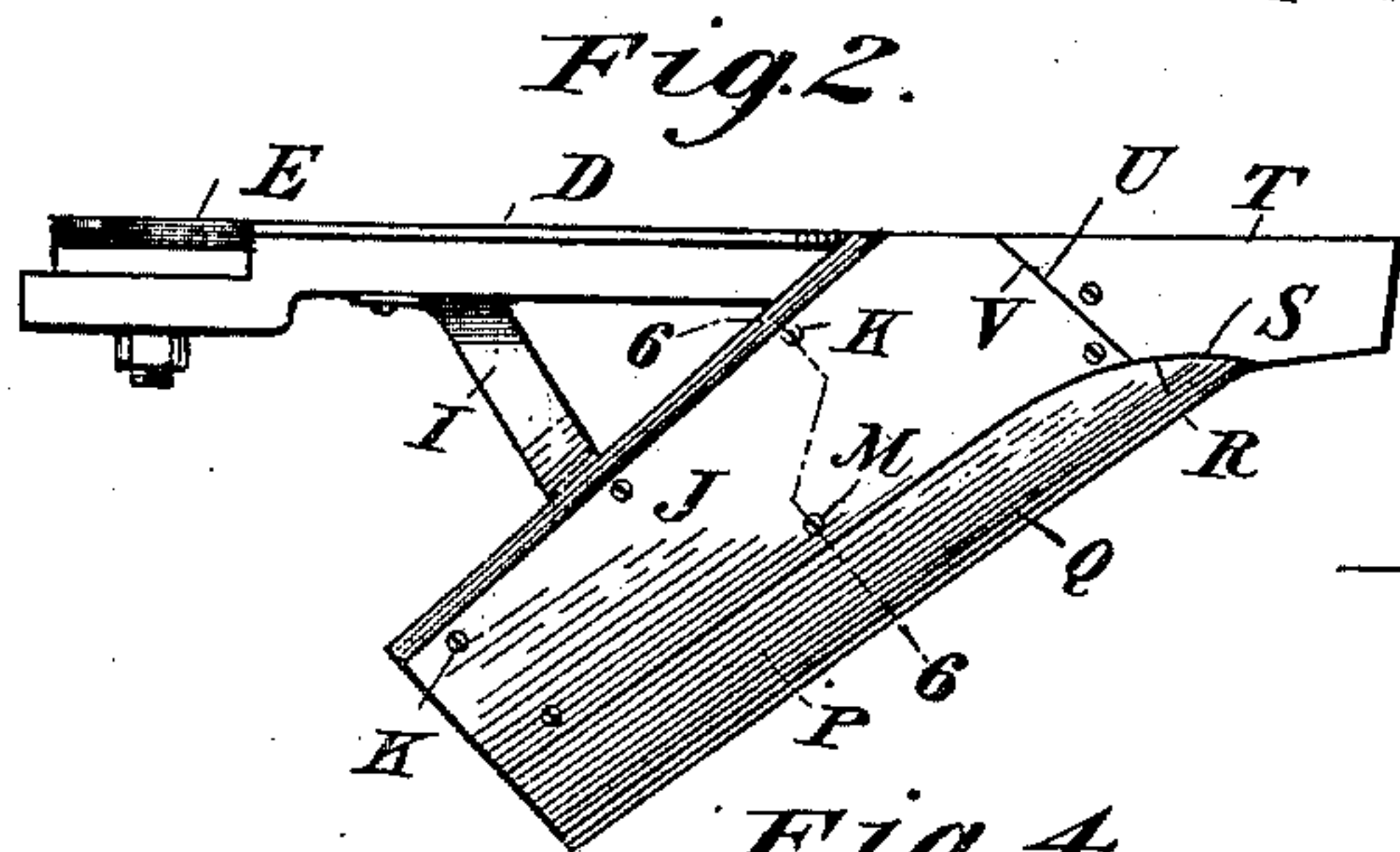
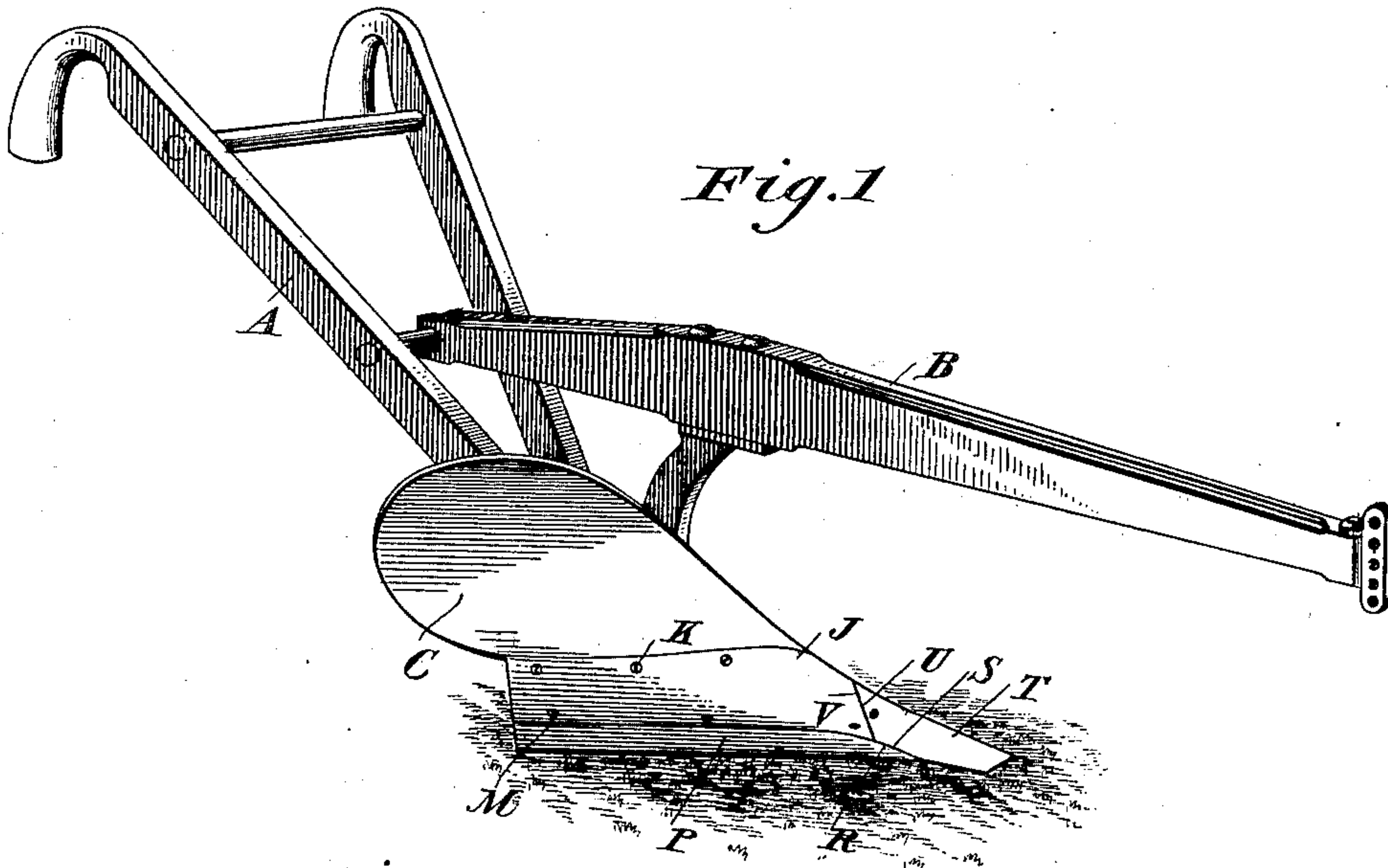
Patented Nov. 19, 1901.

F. J. LEHNER.

PLOW.

(Application filed June 30, 1897.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

FRANK J. LEHNER, OF EYOTA, MINNESOTA.

PLOW.

SPECIFICATION forming part of Letters Patent No. 686,943, dated November 19, 1901.

Application filed June 30, 1897. Serial No. 643,013. (No model.)

To all whom it may concern:

Be it known that I, FRANK J. LEHNER, residing at Eyota, in the county of Olmsted and State of Minnesota, have invented a new and useful Plow, of which the following is a specification.

My invention has relation to certain improvements in plows.

An object of the invention is to provide a plow the parts thereof that are usually affected by wear being made in sections, so that they can be easily removed and replaced as occasion may require.

A further object of the invention is to provide a plow simple in construction and composed of a minimum number of strong and inexpensive parts.

With these and other objects in view the invention consists in certain novel features of construction and in combinations and arrangements of parts, as will be more fully hereinafter described, and specifically pointed out in the claims.

Referring to the accompanying drawings, illustrating my invention, Figure 1 is a perspective view of my improved plow. Fig. 2 is a plan view with the upper section of the moldboard removed. Fig. 3 is a side elevation showing the adjustable heel. Fig. 4 is a plan view, the upper section of the moldboard and the cutter being removed. Fig. 5 is a perspective view of several parts of the plow in a disassembled position. Fig. 6 is a sectional view on the lines 6 6 of Fig. 2. Fig. 7 is a sectional view on the lines 7 7 of Fig. 3.

Like letters of reference will designate similar parts wherever they occur throughout the different views.

In the practical embodiment of my invention I have shown a plow, in which A indicates the handle, B the beam, and C the moldboard, which are generally constructed in any desirable manner.

D indicates the landside portion of the plow, carrying at one end a heel E, said heel being provided with a vertical slot F for the passage of an adjusting-screw G in order that said heel can be raised or lowered as the landside portion of the plow becomes worn. The under or bottom plate H is larger as to width than the share-plate J, the plate H being rigidly attached to the frame and has perfora-

tions which register with perforations through the share-plate J, and to the bottom plate is secured a brace I, which extends to the frame.

J represents a share-plate formed of any suitable material, the same being provided with openings near its upper edges for the passage of bolts K, which are adapted to pass through said openings and through intermediate layer of oil-paper or the like L, this layer and share-plate being secured to the plate H on the rear side thereof, while the lower portion of said share-plate is provided with openings to receive countersunk screws M or other securing means, so that said portion of the share-plate can be removably secured to said plate. It should be noticed that the lower portion of the share-plate J is reduced in thickness, so that its lower edge N will overlie the tongue or reduced portion O on the upper edge of a cutter-blade P, said blade on its lower edge being sharpened, as shown at Q, the upper end portion of the cutter-blade adjacent to the point T and end of the share-plate being curved, as shown at R, to abut against the curved part S of the plow-point and the share-plate. The upper portion of the point T is cut on an oblique line, so that its upper edge U will bear against the edge V of the share-plate, these several plates and plow-point being detachably connected together by means of screws passing therethrough and being secured in the plate of the landside portion of the plow.

By arranging the strip of oil-paper or other like material between the plates as heretofore described the screws will be prevented from rusting, so that when it becomes necessary to remove either of the plates the said screws can be readily withdrawn.

From the foregoing description it will be seen that I provide an exceedingly cheap and simple construction of plow in which the share-plate, lower cutter-blade, and plow-point are held securely yet removably together to permit of the easier removal of either of these parts in case they become worn or it is found necessary to sharpen the knife-edge thereof. It should further be observed that by employing an adjustable heel the landside portion of the plow can be raised to the desired height at any time, and particularly when such portion of the plow be-

comes worn from constant usage, thereby avoiding the necessity of substituting a new part in lieu of the worn portion.

The construction herein described is very simple and but a few parts are required to constitute an operating device, and while I have described the several plates and plow-point as being of a peculiar shape it is of course understood that I do not limit myself to the exact formation described, and it is also evident that various slight changes might be made in the construction and arrangement of the parts herein set forth without departing from the spirit and scope of my invention. Hence I do not care to confine myself to the precise structure herein described and consider myself entitled to any slight changes or variations that may fall within the spirit and scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a plow, the combination with a mold-

board, plow-frame and a point, of a share-plate which is reduced in thickness adjacent to its lower edge, a cutter-blade having a reduced portion or tongue, a backing plate, and a filling-piece beneath the tongue and between the share and backing plate, substantially as shown.

2. In a plow, the combination with a cutter-blade having a reduced longitudinal portion with shoulders adjacent to its upper edge, a share-plate having a flange which overlies the reduced portion of the cutter-blade, a backing plate, a filling-piece of a thickness equal to the thickness of the shoulder of the cutter-blade, and means for connecting the parts together and to the frame and moldboard of a plow, substantially as shown.

FRANK J. LEHNER.

Witnesses:

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