T. H. BURRIDGE.

STEAM PLOW.

No. 29,358. Patented July 31, 1860.

Fig. 1.

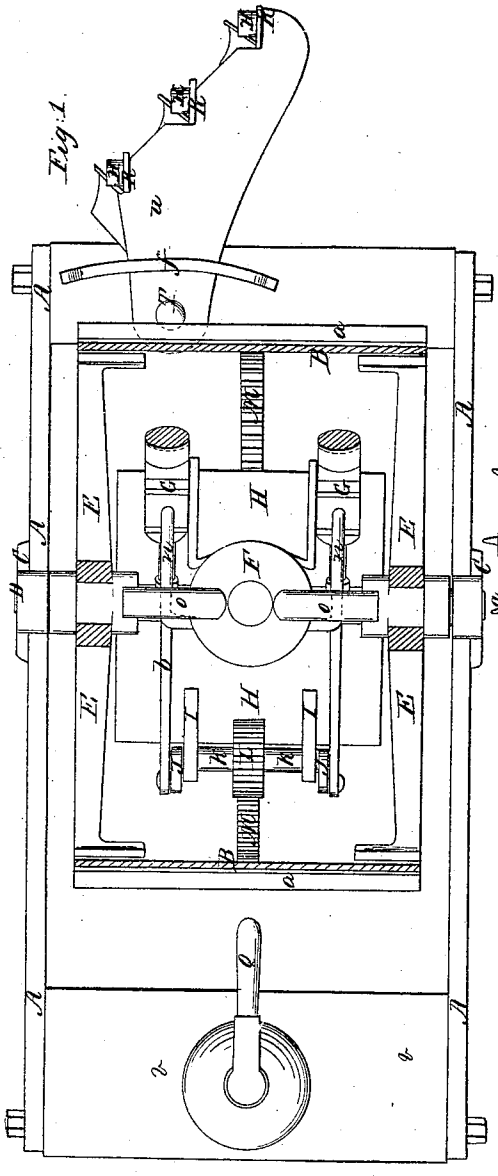
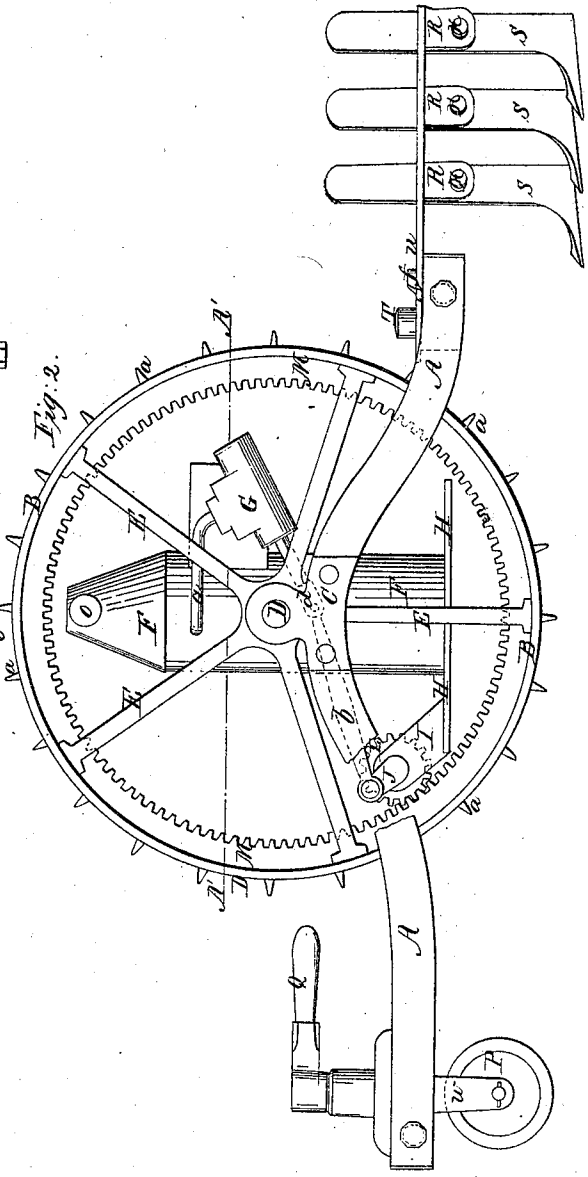


Fig. 2.



UNITED STATES PATENT OFFICE.

THOMAS H. BURRIDGE, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN STEAM-PLOWS.

Specification forming part of Letters Patent No. **29,358**, dated July 31, 1860.

To all whom it may concern:

Be it known that I, THOMAS H. BURRIDGE, of the city and county of St. Louis and State of Missouri, have invented a new and Improved Steam-Plow; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 represents a top view of my invention with the upper part of the wheel or drum B taken off at the line A′, and Fig. 2 is a side elevation of the said invention.

To enable others skilled in the art to which my invention appertains to make and use the same, I will proceed to describe the construction and operation thereof.

Similar letters of reference represent corresponding parts of the different figures of the drawings annexed.

Upon the drawings the frame of my invention is represented by A. It is an open rectangular frame so made as to receive the wheel or drum B, and with bearing-blocks *c* bolted to it, in which the shaft D is fixed. This shaft is the axis of the drum B, which is made broad upon its face, with spuds *a* to keep it from slipping. In each side of the drum aforesaid there is a skeleton-frame, E, fixed, through the center of which the shaft D passes. This said shaft is fixed stationary in the blocks *c*, and the drum B revolves about it; and on the said shaft and between the skeleton-frames E a steam-boiler, F, is secured, to which are fixed the steam-cylinders G, which is intended to represent a steam-engine to be applied to the boiler in a similar manner. No particular kind of engine is intended to be used here, as almost any of the known styles of engines will be applicable.

About the lower end of the boiler a frame or platform, H, is made, upon which the engineer is to stand to attend to the operation of the engines; and upon the front part of this platform a pair of plumber-blocks, I, are secured, in which is located the crank-shaft K, upon which the cranks J are fixed in the manner shown. Upon the crank-shaft aforesaid the pinion L is fixed, so as to mesh into an annular cog-wheel, M, bolted or otherwise secured, to the inside of the drum B. The crank J is connected to the engine in the ordinary manner—that is to say, by means of the connecting-rod *b* and piston-rod *c*, which, having the reciprocating motion common to most engines, causes the pinion to rotate and the drum to travel over the ground and draw with it whatever may be thereunto attached.

The supply-pipe of the engine is shown at *n* and the smoke-pipe of the boiler at O. Under the front part of the frame A the caster-wheel P is placed, to guide the machine by. It is fixed in the stack W upon which the lever Q is also fixed, the said lever being controlled by a man standing on the platform V to guide the machine.

To the back end of the frame A there is a swivel frame or plate, *u*, attached by means of a pin or bolt, T, and behind the said pin and over the said plate *u* there is a guide-plate, X, placed and secured, which is so made and arranged as to hold the plate down upon the frame, and at the same time to allow it to play around the pin T, that it may be adjusted in any certain position or allowed to go free, as circumstances may dictate.

To the lower side of the plate *u* the pendants R R are fastened, to which the stocks S of the plows are secured by means of bolts, &c., which are made to pass through slot-holes, so that the plows are susceptible of being set to plows to any required depth.

By the application of the plow to the frame in the manner above described they act as a tractive force, and thus increase the tractive capacity of the engine, and consequently its capacity to draw the plows; and by making the drum B in the manner shown—that is to say, with a closed surface or periphery—and arranging the engine and boiler therein, a complete engine-house is formed to shelter the attendant and machinery.

Having thus described the construction and operation of my invention, what I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the gang of plows *s s s* with the afore-described drum and engine, in the manner described.

THOMAS H. BURRIDGE.

Witnesses:

J. W. JOHNSTONE,

JNO. T. DICKENSON.