(No Model.)

R. F. COCHRAN.

PLOW.

No. 265,484 Patented Oct. 3, 1882.

Fig. 1.

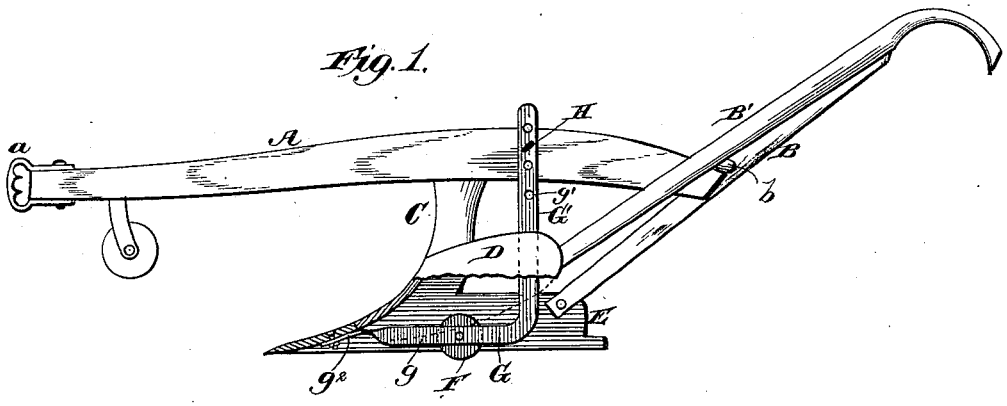


Fig. 2.

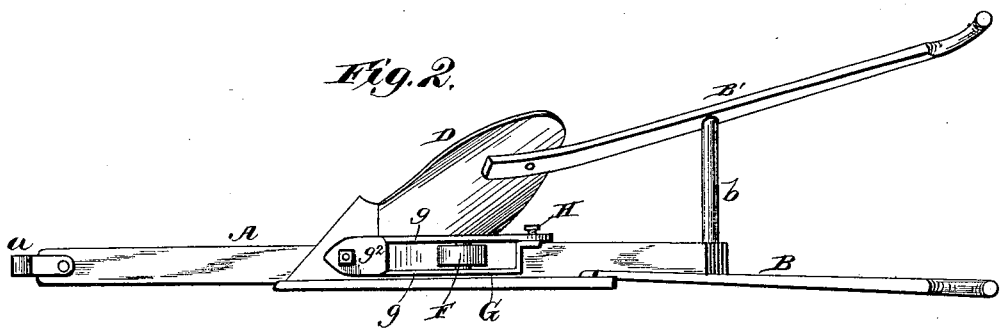


Fig. 3.

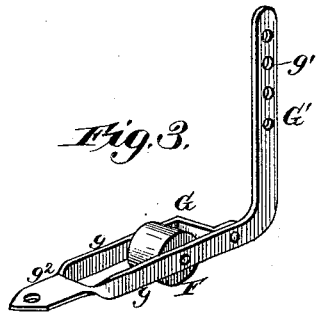
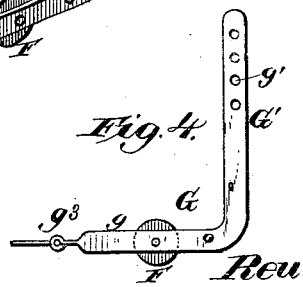


Fig. 4.



Witnesses.
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A. H. Norris.

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UNITED STATES PATENT OFFICE.

REUBEN F. COCHRAN, OF JEFFERSON, ASSIGNOR OF ONE-THIRD TO DOUGLASS H. HARGATE, OF FREDERICK, MARYLAND.

PLOW.

SPECIFICATION forming part of Letters Patent No. 265,484, dated October 3, 1882.

Application filed May 2, 1882. (No model.)

To all whom it may concern:

Be it known that I, REUBEN F. COCHRAN, a citizen of the United States, residing at Jefferson, in the county of Frederick and State of Maryland, have invented new and useful Improvements in Plows, of which the following is a specification.

This invention relates to that class of plows in which a wheel carried by an adjustable standard or support is located between the landside and the mold-board.

My improvement consists in the construction and arrangement of the frame which carries the wheel or roller, as illustrated in the annexed drawings, in which—

Figure 1 is a side view of the plow with a portion of the mold-board removed, so as to show the wheel and its supporting-frame. Fig. 2 is a plan view of the under side of the plow. Fig. 3 shows the frame detached; Fig. 4, a like view of the frame adapted to be pivoted between the mold-board and landside.

The letter A indicates the beam, *a* the clevis at its forward end, and B one of the handles secured to the rear of the beam, the other handle, B′, being rigidly connected with the handle B by means of one or more braces, *b*. One of these handles is secured to the mold-board and the other to the landside, as usual.

C indicates the standard, D the mold-board, and E the usual landside, of the plow. The wheel F is located between the mold-board and the landside of the plow, and has its axle journaled in a frame, G, which in the present instance is secured at its forward end to the under side of the mold-board. This frame comprises two side bars, *g*, between which the wheel is supported, one of said bars having rear extensions, G′, provided with a line of perforations, *g′*, through which a pin or set-screw, H, passes and enters the beam. The forward part of this frame consists of a piece, g^2, of spring metal, which is secured by a bolt or screw to the mold-board. This spring-piece can be either secured to the forward ends of the bars or can be formed in one piece with either one or both of them.

It will be seen that the wheel is located at or about the middle of the plow and about under the standard, the object being to locate it at such point that when the plow is supported upon the wheel the plow will be balanced. This wheel not only reduces wear of the plow, but also serves as a means for regulating the pitch of the share. To adjust the wheel so as to vary such pitch the frame in which the wheel is supported can be raised or lowered and held in its required adjustment by means of the pin or set-screw which is inserted in the line of perforations *g′*, the spring piece or plate at the forward end of the frame admitting of such movement on the part of the latter. But it will be evident that other means than the spring-plate could be employed—as, for example, the frame could be pivoted between the mold-board and the landside by a bolt or pivot, g^3, as shown in Fig. 4; but in either case the frame is detachably secured in place, so that it can be removed when desired.

The length of the frame G will of course be varied to suit different plows, and, if preferred, it can be adjustably connected to the bar G′, which is shown as being extended to form one of the sides of said frame.

In conclusion, it may be mentioned that by locating the wheel as shown and described it will travel in the furrow before any stones or clods can drop into the same, thus allowing the plow to run smoothly and easily.

While numerous plows are balanced upon wheels, yet thus far the wheel has not been mounted in a frame having at its rear an upwardly-extending perforated arm, and at its front a spring-plate bolted to the mold-board. The spring-plate yields when the rear end of the frame is raised, thus allowing the adjustment to be made. It also holds the parts from rattling by reason of its resiliency, and constitutes a novel connection between the frame and the plow.

What I claim is—

The combination, in a plow, of the frame G, having parallel sides *g*, a perforated arm, G′, extending upwardly from its rear and adjustably secured to the beam, and at its front a spring-plate, g^2, detachably bolted to the under side of the mold-board, with the single wheel F mounted between the parallel sides of said frame, and located so as to balance the plow, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

REUBEN F. COCHRAN.

Witnesses:

JAMES L. NORRIS,

JAMES A. RUTHERFORD.