

(No Model.)

W. H. HOLSCLOW.
PLOW.

No. 459,204.

Patented Sept. 8, 1891.

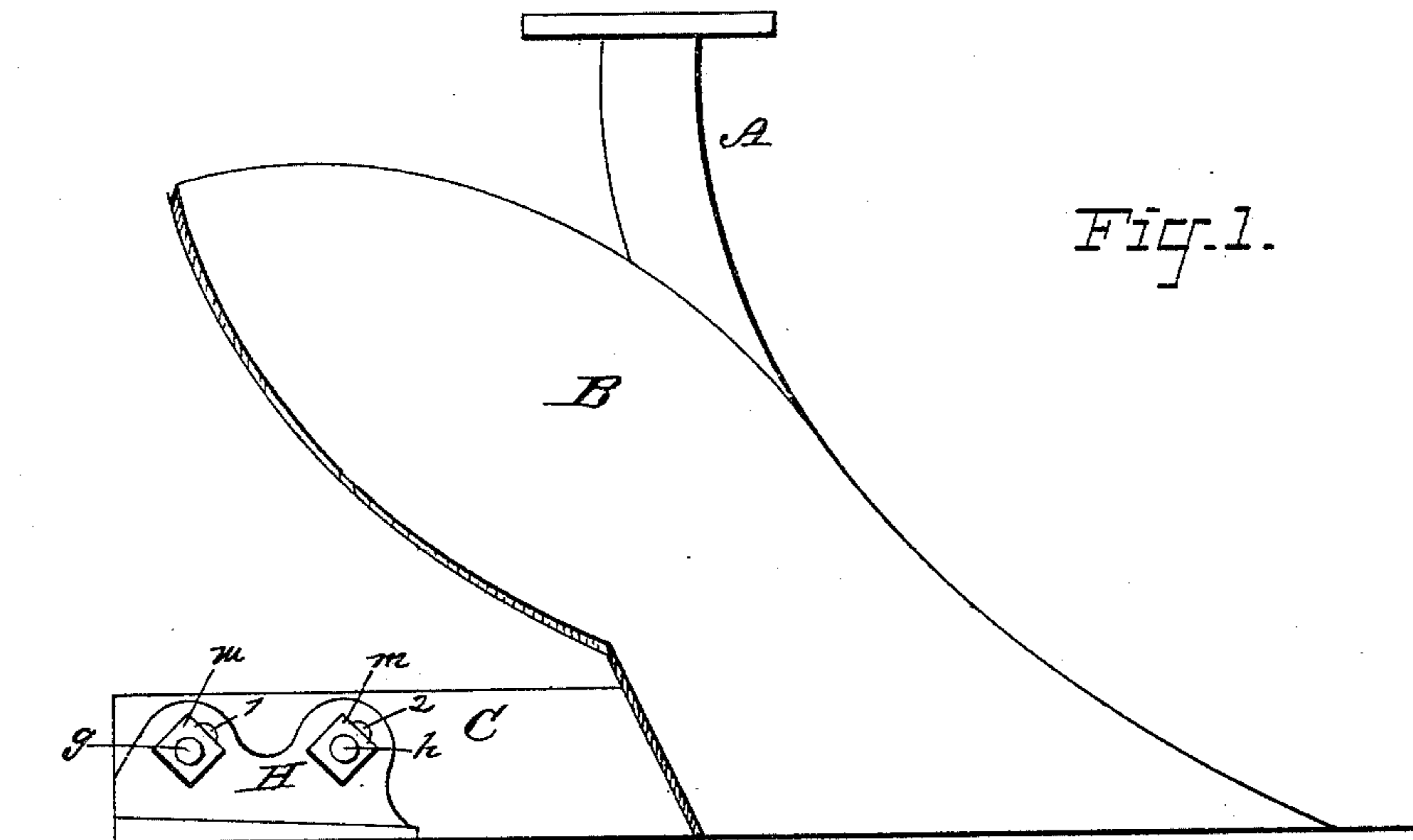


Fig. 1.

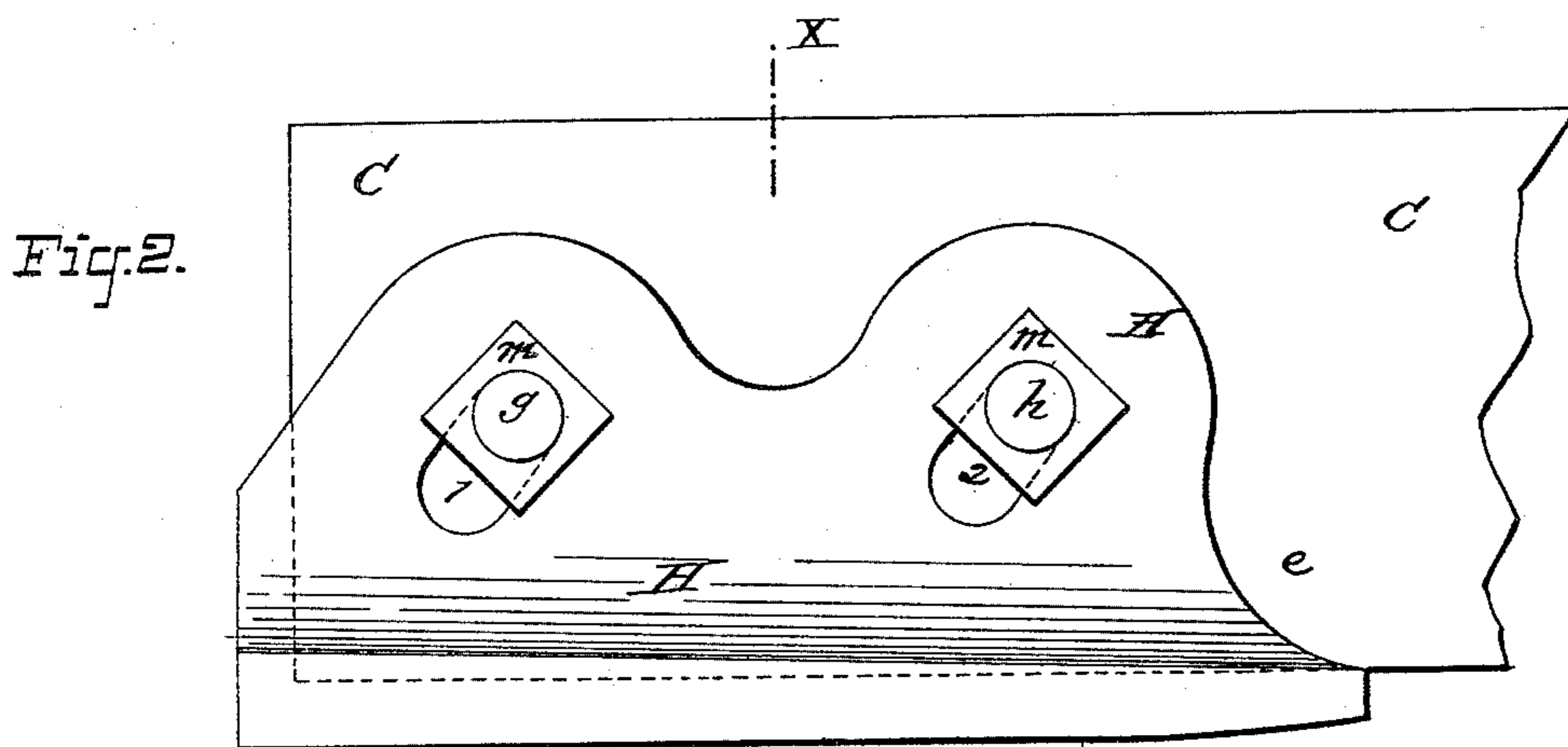


Fig. 2.

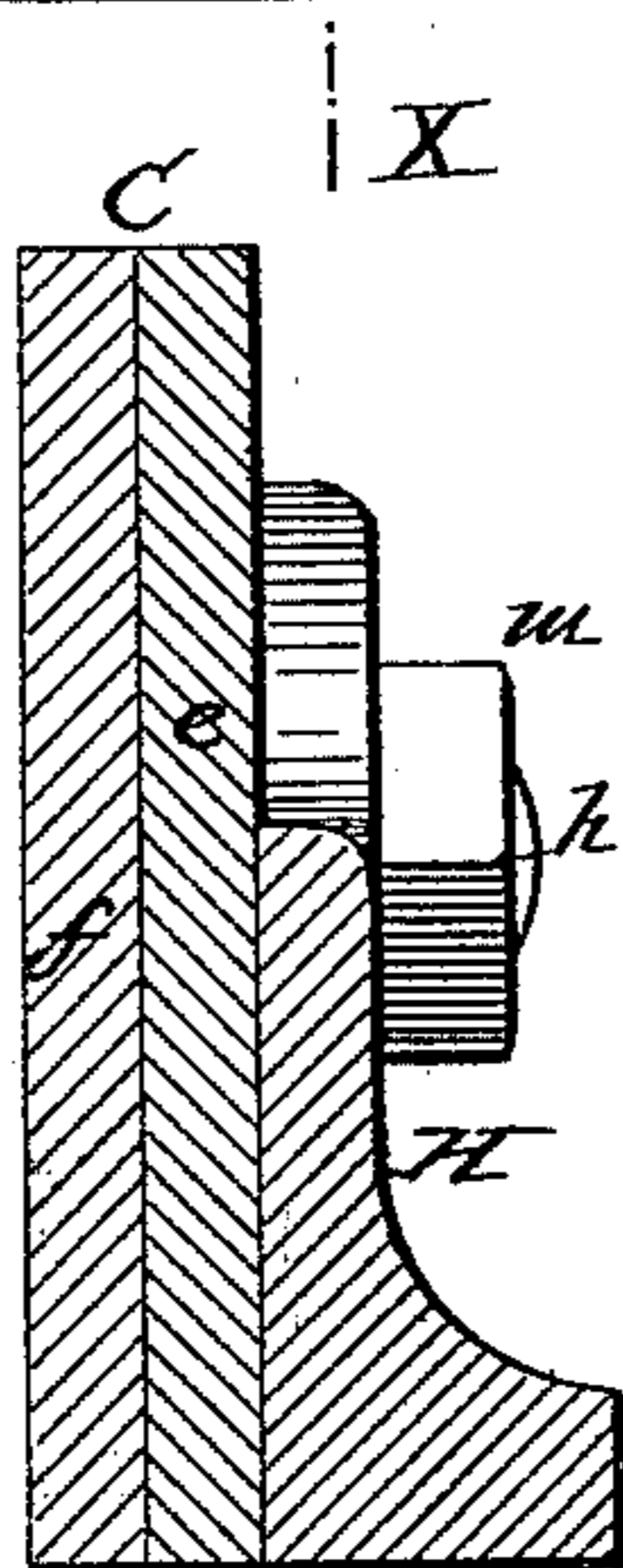


Fig. 3.

ATTEST:
J. A. Hurdle
B. Fox

INVENTOR:

Wilford H. Holsclaw

BY
L. N. McArthur Attorney

UNITED STATES PATENT OFFICE.

WILFORD H. HOLSCLAW, OF LOUISVILLE, KENTUCKY, ASSIGNOR TO B. F. AVERY & SONS, OF SAME PLACE.

PLOW.

SPECIFICATION forming part of Letters Patent No. 459,204, dated September 8, 1891.

Application filed February 6, 1891. Serial No. 380,458. (No model.)

To all whom it may concern:

Be it known that I, WILFORD H. HOLSCLAW, of Louisville, in the county of Jefferson and State of Kentucky, have invented a new and useful Improvement in Plows; 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.

As those experienced in the manufacture of plows and familiar with the use of them will understand, one of the points at which the plow of the ordinary construction first wears is at the heel or rear end of the land-side, and any material wear at this point seriously impairs or interferes with the perfect working of the plow and the easy management of the implement, since the wearing away of the bottom surface of the landside at the heel of the plow renders it necessary for the plowman to lift up more on the handles in order to cause the point to properly penetrate the soil, and thus plow to the desired depth. In view of these facts it has long been understood to be a great desideratum in a plow to have the construction such that any undue wear at the heel might be easily compensated for, so as to keep the bottom of the landside in the proper condition or plane clear back to the extreme rear end or heel thereof; and I believe it has been suggested to accomplish this desirable end by the use, in combination with the inner rear portion of the landside, of a supplemental metallic device pivotally connected (at its forward end) to a point somewhat in advance of the rear end of the landside and adapted to be adjusted up and down at its rear end by a vibratory motion round about its pivoted point of connection to the landside, so as to afford a thus variable point of support at the heel of the plow to compensate for wear at the point; but so far as I know no such suggested construction has, practically, fully overcome the difficulties resulting from the inevitable rapid wearing away of the heel of the landside of the plow.

My invention has for its object to provide a simple, durable, and perfectly efficient means of overcoming the evil alluded to and well understood by those skilled in the art;

and to this end and object my invention may be said to consist, essentially, in the combination, with the rear inner portion of the land-side of the plow, of a cast-metal bearer-piece, which is adjustable up and down bodily and variably at each end, whereby the rear bottom portion or plow-supporting heel portion of the landside may be kept in the proper plane and condition as the parts wear away, all as will be hereinafter more fully explained, and as will be more specifically pointed out in the claim of this specification.

To enable those skilled in the art to understand and practice my invention, I will now proceed to more fully describe it, referring by letters to the accompanying drawings, which forms part of this specification, and in which I have shown my invention carried out in the precise form in which I have so far practiced it.

In the drawings, Figure 1 is a side elevation of so much of a plow as it is necessary to show in order to illustrate my invention. Fig. 2 is a similar view of the rear portion of the landside part of the plow, but drawn full size and showing the parts differently adjusted. Fig. 3 is a detail vertical section at the line $x x$ of Fig. 2.

In the several figures the same part will be found designated by the same letters and numerals.

A is the standard, B the mold-board, and C the landside, of a B. F. Avery & Sons' steel plow having my improvement embodied therein.

In the plow shown the landside C is composed of two metallic plates $e f$, (see Fig. 3,) the inner one e of which is preferably about three-sixteenths of an inch thick, while the outer one f is about five thirty-seconds of an inch thick, and of the two threaded bolts g and h , which I employ for the attachment of the supplemental piece I, (in a manner to be presently explained,) one of them g passes through both of said plates, having its partially-polygonal head countersunk in the outer plate and finished off smooth and flush with the outer surface of said plate, while the other one h passes through the inner plate only, having its squared head portion fitted

to a square hole in said plate. Each of the bolts *g* and *h* has its body portion threaded to receive a nut *m*, all as clearly shown.

H is a cast-metal shoe or supplemental piece, which, as shown, is adapted to be securely fastened in place against the inner surface of the landside by means of the bolts *g* and *h* and their nuts *m*, and which, as seen at Fig. 1, is adjusted so as to have its broad lower edge lie in a plane coincident with that in which lies the lower surface of the landside. Preferably this piece H is made with the oblong perforations 1 and 2, arranged obliquely and about parallel, as shown, and it is important that it be capable of bodily adjustment and such movements (when unclamped from the landside) as that its lower edge or bottom surface may be raised and lowered to any desired extent at each end, in order that its bottom or ground bearing-surface may be set in any desired plane (within the range of its adjustment) as the said bottom and also the bottom surfaces of the heel portions of the two plates *e* and *f* wear away.

When the plow is new, the adjustable cast-metal heel-piece H is of course set and fastened in the position relatively to the landside, (shown at Fig. 1,) and after the bottom surfaces of both the said piece and of the landside plates *e* and *f* shall have perceptibly worn down the original condition of the ground bearing-surface of the heel of the plow may be practically restored by loosening the nuts *m*, so as to release the piece H and allow it to move down, as illustrated at Fig. 2, adjusting it so as to put its bottom surface in substantially the same plane (relatively to the forward portions of the land-

side's bottom surface) that it originally occupied and then reclamping it to the landside by turning home the nuts *m*. To render this adjustable device H as efficient and durable as possible, I make its base or bottom wearing-surface greater in width than the combined thicknesses of the two plates *e* and *f*, so that when it has to be adjusted to a lower plane than that of the partially worn-away part of the landside the heel of the plow will still have a desirably wide ground bearing-surface. Of course the exact sizes and proportions of parts shown may be varied, as well as the precise details of the construction, without departing from my invention, so long as the described principle of construction and mode of operation be retained.

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

In a plow provided with means for compensating for the uneven wearing away of the rear and heel portion of the landside, the combination, with the landside C, of a cast-metal shoe or supplemental piece H, which, as shown, is adjustable up and down bodily and variably at its ends, whereby the bottom or bearing surface of the said adjustable metallic shoe may be set and held at any desired elevation and in any desired plane relatively to the forward bottom part of the landside, as and for the purpose hereinbefore set forth.

In witness whereof I have hereunto set my hand this 31st day of January, 1891.

WILFORD H. HOLSCLOW.

In presence of—

HARRY T. EVANS,
C. F. HUHLEIN.