No. 817,441.

PATENTED APR. 10, 1906.

F. B. NIESZ & J. M. STEWART.

PLOW.

APPLICATION FILED DEC. 26, 1905.

2 SHEETS—SHEET 1.

Fig. 1.

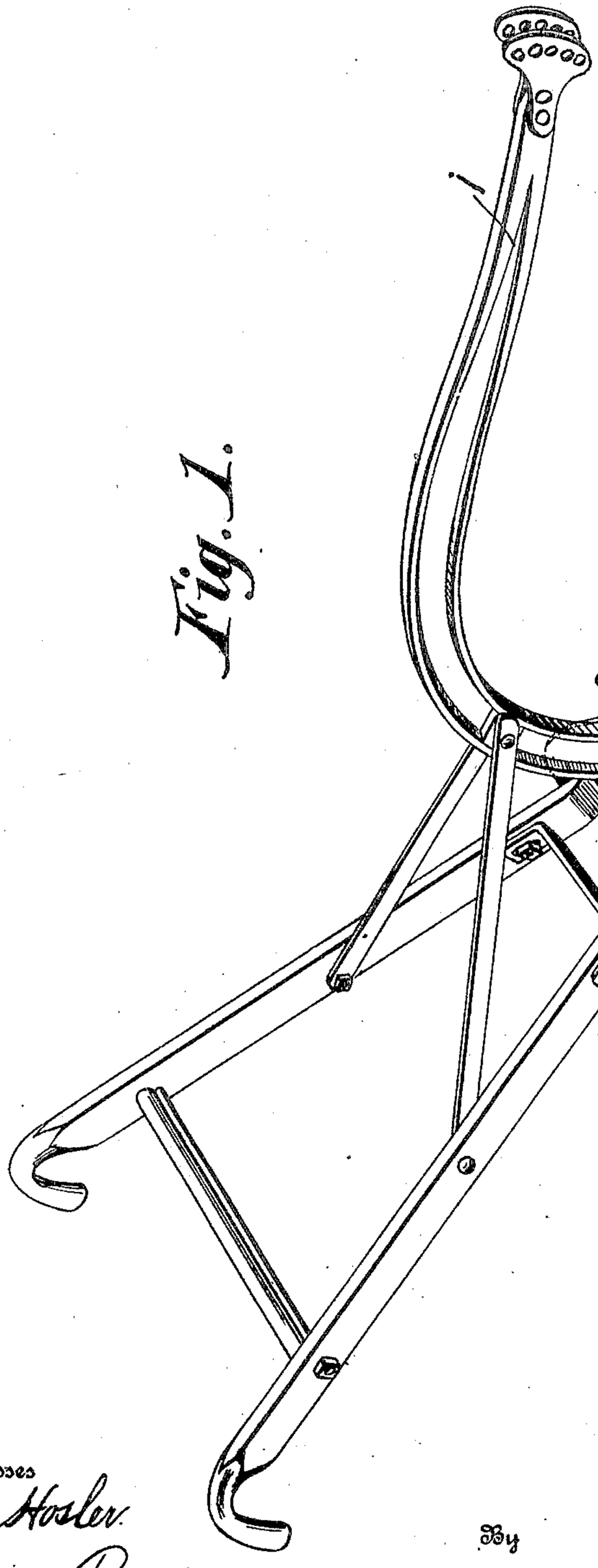

Fig. 2.

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2 SHEETS—SHEET 2.

Fig. 4.

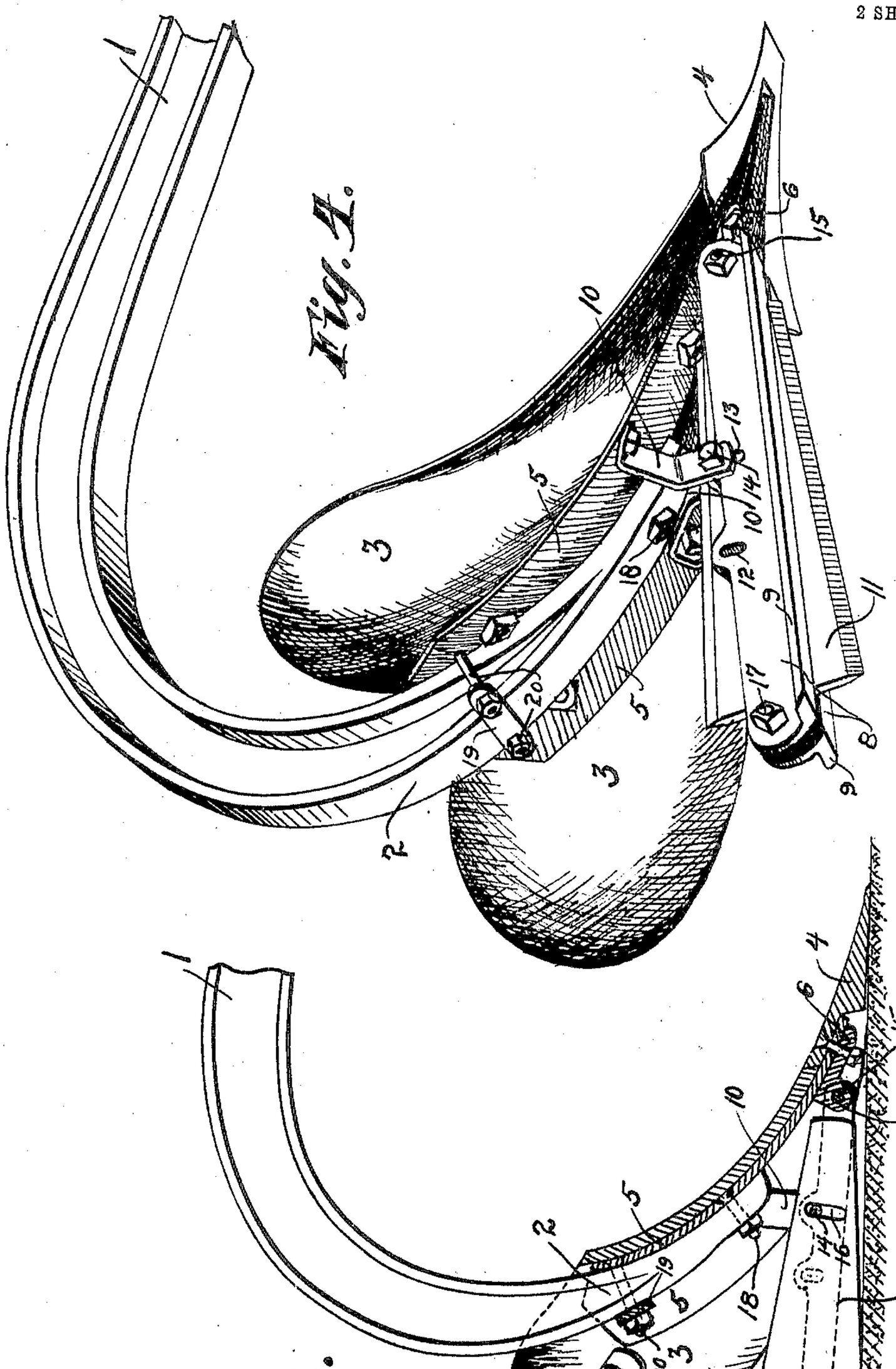

Fig. 3.

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UNITED STATES PATENT OFFICE.

FRANKLIN B. NIESZ AND JONATHAN M. STEWART, OF CANTON, OHIO, ASSIGNORS TO THE BUCHER & GIBBS PLOW COMPANY, OF CANTON, OHIO, A CORPORATION OF OHIO.

PLOW.

No. 817,441. Specification of Letters Patent. Patented April 10, 1906.

Application filed December 26, 1905. Serial No. 293,396.

To all whom it may concern:

Be it known that we, FRANKLIN B. NIESZ and JONATHAN M. STEWART, citizens of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Plows; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the numerals of reference marked thereon, in which—

Figure 1 is a perspective view of our improved plow. Fig. 2 is a view showing the runner and connecting-head. Fig. 3 is a vertical longitudinal section of the moldboard and share and connecting-head. Fig. 4 is a perspective view showing the bottom or under side of the plow.

The present invention has relation to plows; and it consists in the different parts and combination of parts hereinafter described.

The particular class of plows to which this invention applies is what is known as "double-moldboard."

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, 1 represents the beam of the plow, which is curved downwardly and forwardly, so as to form a suitable standard 2. For the purpose of providing a means for attaching the moldboards 3 and the share 4 we provide the converging flanged plate 5, which diverging flanged plate is connected to the standard 2 in any convenient and well-known manner. The parts just above described form no particular part of the present invention, except that they are necessary in carrying out the purpose and object hereinafter pointed out by means of the device hereinafter described. At the lower forward end of the flanged plate 5, and upon the under side thereof, is attached the flanged runner connecting head or block 6, which head or block is provided with the flange 7, said flange being for the purpose of pivotally attaching the runner 8, which runner is provided at its bottom or lower edge with the lateral flanges 9. For the purpose of holding the runner 8 in proper relative position and preventing any swinging or vibrating movement of said runner the braces 10 are provided, which braces are connected at their top or upper ends to the converging flanged plate 5, as best illustrated in Fig. 4. The runner members 8 are spaced a short distance from each other, and between which runner members is located the double-edged knife 11, which knife is adjustable up and down, and to provide for the adjustment slots 12 and 13 are formed in the runners 9. In use the ground contact-surfaces of the runner-flanges 9 are worn away unevenly, and for the purpose of providing a means for compensating for this uneven wear the runner 8 is so formed that its ends can be transposed, or, in other words, the runner can be easily removed by detaching the bolts 14 and 15, after which the ends of the runner can be changed from time to time. The forward ends of the runner members are pivotally attached to the flange 7, so that the rear ends of the runner can be adjusted up and down by loosening the bolt 14, at which time the runner is free to turn upon the pivotal points. The knife 11 is provided with the slot 16, through which slot the bolt 14 is passed, and when the nut of the bolt 14 is tightened the knife 11 will be held in proper relationship with the runner 8. For the purpose of assisting in holding the rear end of the knife 11 the clamping-bolt 17 is provided, by means of which the runner 8 can be snugly seated against the faces of the knife 11. For the purpose of providing a means for double wear, so far as the knife is concerned, it is so formed that it can be inverted, thereby providing a double-edged knife or blade. Another object in providing the kind of adjustment for the knife or blade described is that it can be moved up and down between the runner members without changing angularity of said knife or blade as between said runner members and the knife or blade, respectively, by which adjustment no fixed pivotal connection is necessary as between the runner and knife, by which arrangement the knife or blade is adjusted up and down between the runner members throughout its entire length. By providing the adjustment for the runner and the knife or blade they can be set in different positions as between the moldboards and to different depths, thereby assisting in the operation of the plow,

and thereby and at the same time cause the plow to move in a straight line and prevent any accidental displacement of the plow regardless of the depth the plow may be set to run.

For the purpose of securely attaching the converging flanged plate 5 to the standard 2 the bolt 18 is provided, which bolt secures the lower forward end of the standard to the converging flanged plate 5. The upper rear end of the converging flanged plate 5 is attached by means of the cross-bar 19 and the bolts 20. It will be understood that the apertures 21 serve the dual purpose of providing a means for clamping the rear ends of the runner members together by means of the clamping-bolt 17 and also serves for receiving the bolt 15 when the ends of the runners have been interchanged.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A plow and a suitable standard therefor, a converging flanged plate secured thereto, a flanged block or head secured to the lower forward and under portion of the converging flanged plate, a runner pivotally attached to the flange of the head or block, said runner adapted to be interchanged endwise, and a knife adjustably secured between the runner members and a double moldboard and share secured to the converging flanged plate, substantially as and for the purpose specified.

2. In a plow, the combination with the standard, share and moldboard, a converging flanged plate, of a depth runner adapted to be interchanged endwise, a flanged block secured in fixed position upon the under side of the converging flanged plate, a double-edged knife adapted to be clamped in fixed position with reference to the runner, and means for adjusting the double-edged knife in a horizontal plane, substantially as and for the purpose specified.

3. In a plow the combination with a standard, share and double moldboard, of a converging flanged plate, of a depth runner and a flanged block, said depth runner pivotally attached at its forward end to the flanged block, means for holding the runner in fixed adjustment, and means for adjusting the double-edged knife relative to the runner, substantially as and for the purpose specified.

4. A double-moldboard plow comprising a standard, a converging flanged plate secured to the standard, and a share secured to the converging flanged plate, a flanged block secured to the converging flanged plate, a depth runner formed of sections or members and adapted to be reversed lengthwise, and their forward ends pivotally attached to the flange of the flanged plate, a knife adjustably attached between the sections of the runner, means for holding the runner-sections and the knife in fixed adjustment, substantially as and for the purpose specified.

5. In a plow the combination with a suitable standard, a moldboard and share, a converging flanged plate and a flanged block secured thereto, a depth runner pivotally attached to the flange of the flanged plate, said depth runner adapted to be interchanged endwise, a double-edged knife provided with a slot intermediate its ends, a bolt located through the depth runner and the slot of the depth runner and means for clamping the double-edged knife back of the rear end of said knife, substantially as and for the purpose specified.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

FRANKLIN B. NIESZ.
JONATHAN M. STEWART.

Witnesses:
J. M. FOGLE,
W. H. CAVNAH.