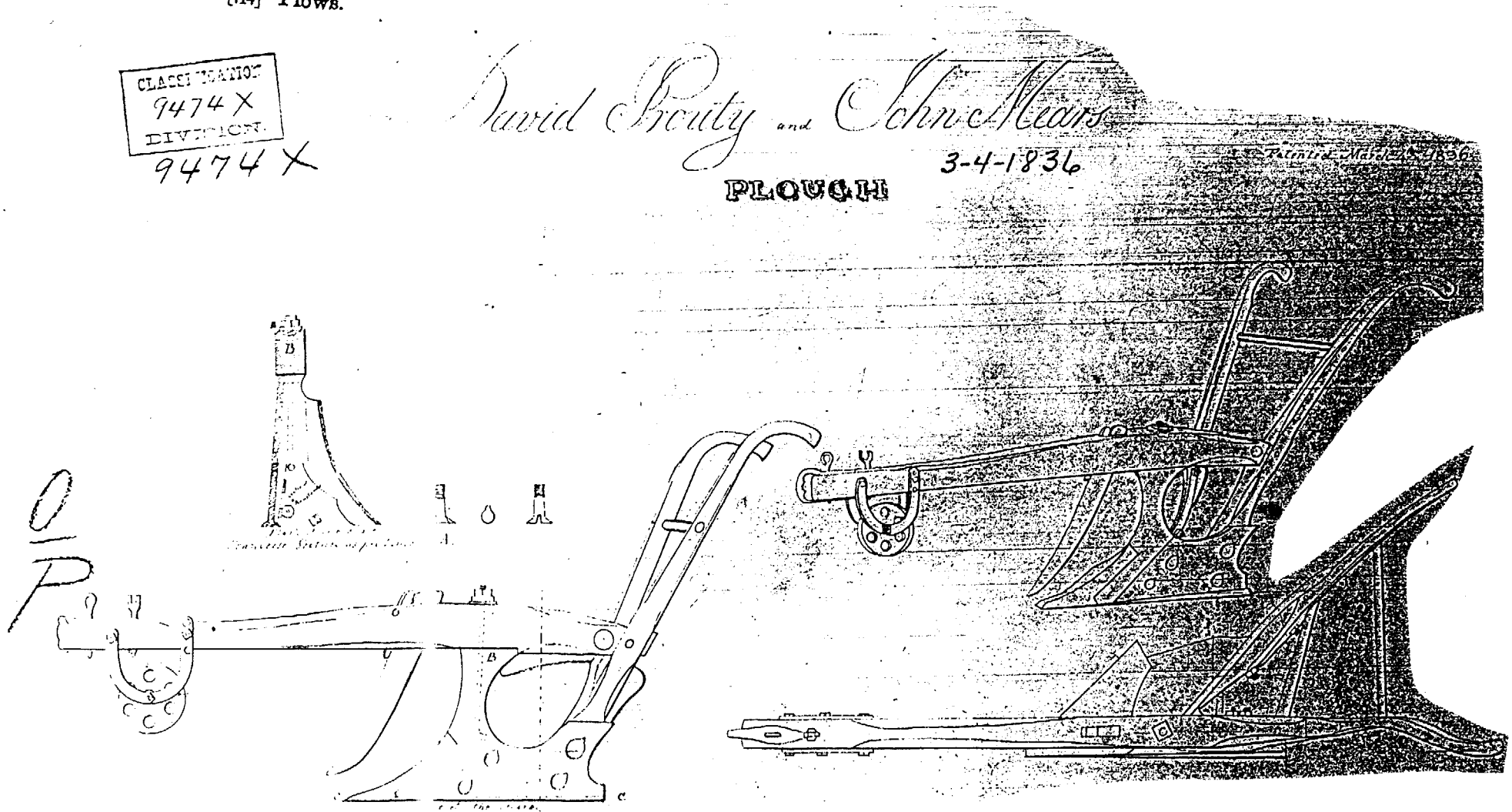
CLASSIFICATION
9474 X
DIVISION.
9474 X

David Beaty and John Mears

3-4-1836

PLOUGH



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March 4, 1836 43

David Beaty & John Means.

Letters Patent

The Specification referred to in these Letters Patent and making part of the same containing a description in writing of the said David Beaty and John Means themselves of their improvement in the construction of the Plough.

To all to whom these presents shall come, David Beaty of Hanover in the County of Plymouth and Commonwealth of Massachusetts and John Means of Dorchester in the County of Suffolk in said Commonwealth Gentlemen, send Greeting — Be it known that we the said Beaty & Means, have jointly invented made and applied to use a new and useful improvement in the construction of the Plough, which invention and improvement we describe and ascertain as follows, viz. Whereas the standard and landside of the Plough has been placed perpendicular to and at right angles with the plane of the share, & the standard the beam has been placed in such manner as to form an acute angle with the landside of such extent as to place that part of the beam to which the moving power is applied at the distance of three or more inches from the extended line of the landside to the right, while the after part of the beam extends one or more inches to the left of the perpendicular of the landside near the handle, the object has been to cause the Plough "to run to the land" or hold its width of furrow, the effect produced has been an uneasy dragging motion as it meets resistance at the point ing or heel. We make our Ploughs with the standard and landside forming an acute angle with the plane of the share, the standard inclining to the right or furrow side in such manner as to enable us to place the centre of the beam in a line parallel with the landside, the fore part there of at such distance from the extended line aforesaid as to cause the Plough to hold its width of furrow and the after part falling within the perpendicular of the landside of the Plough, the centre of it being nearly perpendicular to the centre of resistance on the mould board, which we estimate to be about one fourth part of the latter distance from

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the Landside the Share, and at about one third part of the perpendicular height from the plane of the share to the upper edge of the mouldboard. This location of the centre of resistance we take on the fact that many Ploughs which have been used in sharp sandy soils have been worn quite through at that point. The result of this formation of the plough, is a steady well balanced motion requiring less power of thrust, and less effort in directing the Plough in its course. The inclination of the standard and Landside causes the Plough to cut under and take up the furrow in the form of an obliquee angled parallelogram, or like a board feather edged, which being turned over falls in level with the last furrow more readily than the right angled or square edged work. The coulter or knife turning a similar incision cuts the roots of the grass &c. and leaves all vegetable matter on the surface at a greater distance from the under edge of the furrow which being turned over more readily falls in and is far better covered than with a square edged work. The top of the Standard through which the bolt passes to secure the beam is transversely parallel to the plane of the Share, and extends back from the bolt to such distance as to form a brace to the beam, when the after part is pressed down by lifting at the fore part the share being fast under a rock or other obstruction. The after part of this extension is squared in such manner that being fogged into the beam it retains the bolt in heavy draughts.

The bolts which we use to fasten the pieces of cast iron (of which our Ploughs are made) together and to the wrought work are formed with inverted Conoid heads or like the wood screw, with a projection on the under side of the head of semicircular form which fits into a groove in the corresponding part of the bolt hole as it is cast to receive it, which not only prevents its turning but also diminishes the liability of breakages at the corners of square holes all which will more fully appear by reference to the drawing annexed to and forming part of this Specification. We hereby declare that what we claim as new & of our invention in the construction of cast Ploughs as aforesaid

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and the several parts thereof each separately, but in combination for the purpose aforesaid, viz 1st The inclining the standard and Land side so as to form an acute angle with the plane of the share 2nd The placing the beam on a line parallel to the land side, within the body of the Plough, and its centre nearly in the perpendicular of the centre of resistance. 3rd The forming the top of the standard for Brace and draft. We do not confine our claim to any particular form or construction excepting such form as may be necessary to place the beam in the perpendicular of the centre of resistance and parallel to the land side and also to such form of the top of the standard as shall serve for brace and draft but have given such form as we deem to be most convenient which may be varied as is obvious.

In testimony that the above is a true specification of our invention we have hereto subscribed this three & 20th day of November in the year of our Lord one thousand eight hundred and thirty five

Witnesses
George Beauly
Ellis Hay Laing

David Beauly
Fabin Moras

JWS.

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(Enrolled 4th March 1836.)

Browne