

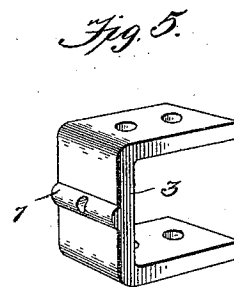
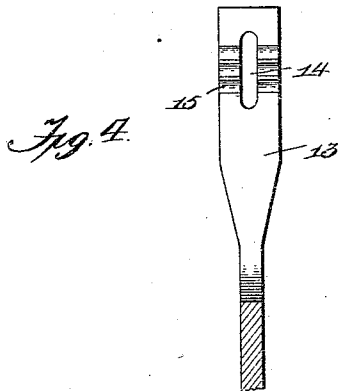
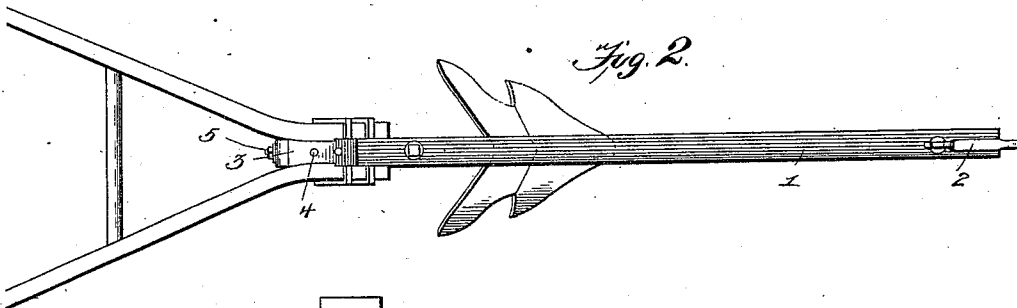
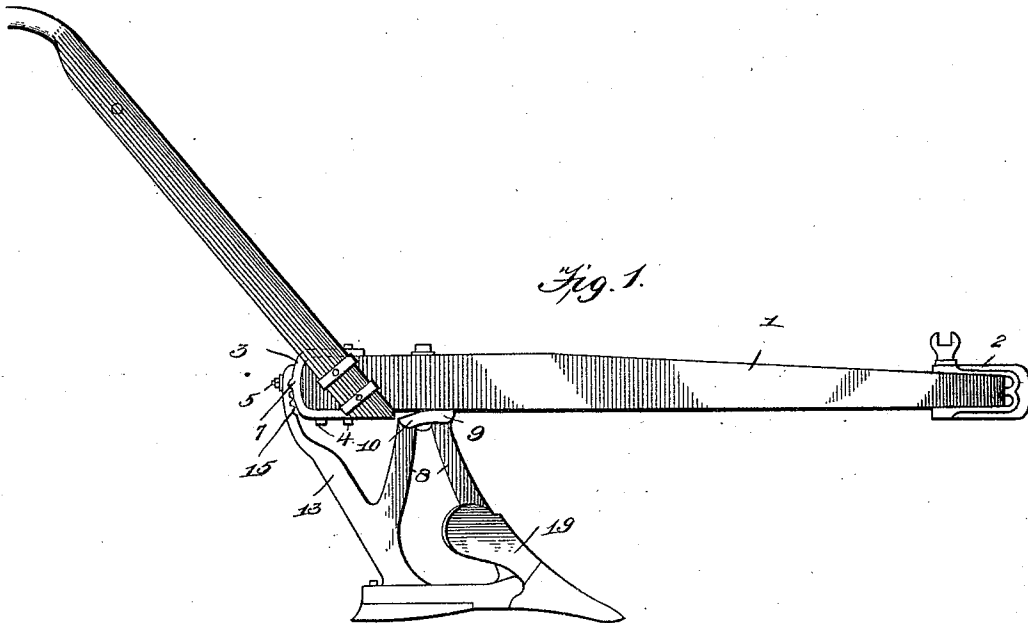
(No Model.)

2 Sheets—Sheet 1.

E. B. JAMES.
PLOW.

No. 553,914.

Patented Feb. 4, 1896.



Inventor

Edward B. James,

Witnesses:

John C. Shaw.
R. M. Smith.

By *his* Attorneys.

Chas. Snow & Co.

(No Model.)

2 Sheets—Sheet 2.

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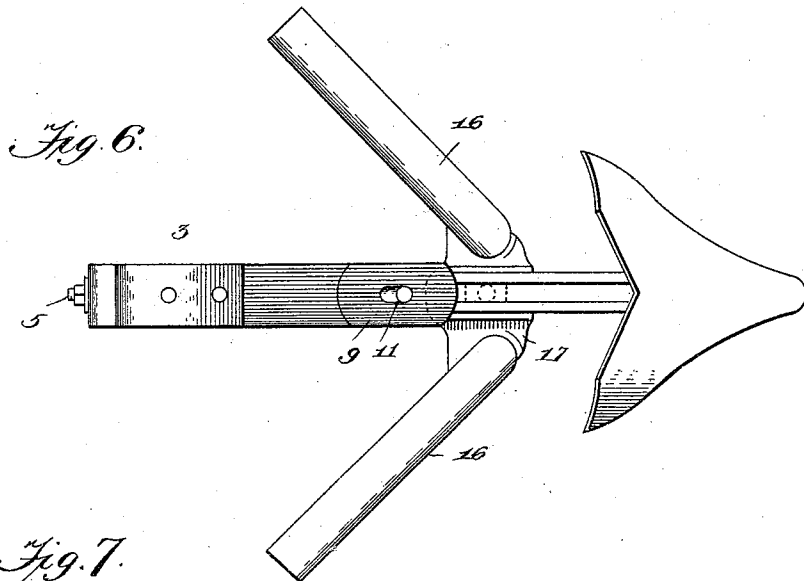
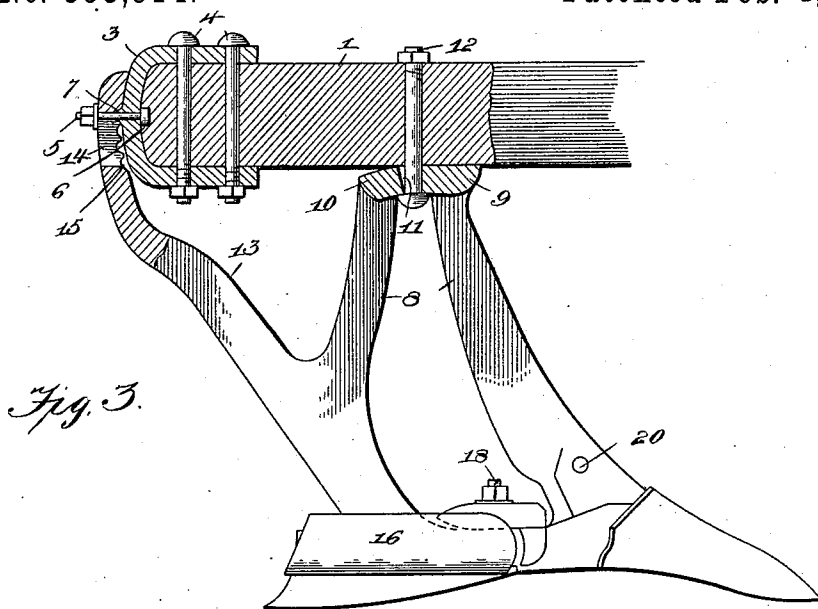
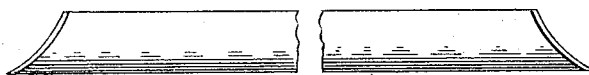


Fig. 7.



Inventor

Witnesses

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P. M. Smith

By *W. C. Atterneys.*

Edward B. James,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

EDWARD BRADFORD JAMES, OF THOMASVILLE, GEORGIA, ASSIGNOR OF
ONE-HALF TO W. R. PITTMAN, OF SAME PLACE.

PLOW.

SPECIFICATION forming part of Letters Patent No. 553,914, dated February 4, 1896.

Application filed June 22, 1895. Serial No. 553,710. (No model.)

To all whom it may concern:

Be it known that I, EDWARD BRADFORD JAMES, a citizen of the United States, residing at Thomasville, in the county of Thomas and State of Georgia, have invented a new and useful Plow, of which the following is a specification.

This invention relates to an improvement in plows.

10 The object of the present invention is to simplify and improve the means for regulating the depth of cut of the plow by mounting upon the rear end of the plow-beam a metal cuff formed with one or more ribs or projec-
15 tions upon its rear face and by combining therewith a plow standard or stock having a rearwardly and upwardly extending arm slotted and notched or serrated upon its inner face to engage with such rib or projection,
20 and also formed with a rocker-face which underlies and bears upwardly beneath and against the lower face of the plow-beam, being secured thereto by a vertical bolt.

25 Other objects and advantages of the invention will appear in the course of the subjoined description.

30 The invention consists in a plow embodying certain novel features and details of construction and arrangement of parts whereby advantages in point of simplicity, strength, and durability are attained, as hereinafter fully described, illustrated in the drawings, and finally embodied in the claims.

35 In the accompanying drawings, Figure 1 is a side elevation of a plow embodying the improvements contemplated in this invention. Fig. 2 is a plan view of the same. Fig. 3 is an enlarged detail elevation, partly in section, showing the improved plow-stock, the
40 form of the metal cuff, and the manner of securing and adjusting the plow-stock relatively to the plow-beam. Fig. 4 is an elevation of the inner face of the serrated arm or extension of the plow-stock. Fig. 5 is an enlarged detail perspective view of the cuff
45 which embraces the rear end of the plow-beam. Fig. 6 is an enlarged plan view of the plow standard or stock with the moldboard removed and the sweeper attachments applied. Fig. 7 is a rear elevation of the outer

ends of the sweeper attachments, showing the construction and disposition of the same.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

55 Referring to the accompanying drawings, 1 designates a plow-beam of any ordinary or preferred construction, the same being illustrated in the form of the ordinary wooden beam and having pivotally secured to its forward end a clevis 2 providing for the attachment of the team. The rear end of the plow-beam has secured thereto a metal cuff 3, which is substantially U-shaped, comprising an upper and a lower arm, which embrace the plow-beam upon top and bottom, and a connecting
60 portion which passes around and fits snugly against the rear extremity of said beam, the cuff as a whole being firmly secured to the beam by means of a pair of bolts 4 passing vertically through the beam and aligning perforations in the upper and lower arms of the cuff. By means of this construction all liability of the rear end of the plow-beam to split is effectually overcome. The connecting
75 portion of this cuff is formed with a perforation admitting of the passage of a bolt 5; the head of which is adapted to rest inside of the cuff and within a recess 6 in the rear end of the plow-beam, which corresponds in shape
80 to the head of said bolt and serves to prevent the latter from turning. The central or connecting portion of the cuff is further provided with a rib or projection 7 extending backward from the cuff and arranged preferably about in horizontal alignment with
85 the perforation which receives the bolt 5.

88 8 designates the plow standard or stock, which is preferably composed of a pair of uprights connected together in any convenient
90 manner at their lower ends and also connected at their upper ends in a head-piece 9, of a width corresponding to the width of the plow-beam 1. This head 9 has its upper face rounded off, as indicated at 10, thus constituting what may be termed a "rocker," which
95 is adapted to underlie and bear upwardly beneath and against the lower face of said beam. This head-piece or rocker is formed with a vertical perforation or opening 11, through
100

which a bolt 12 passes, said bolt also extending through a vertical perforation in the plow-beam. In order to permit the plow standard or stock 8 to be rocked or vibrated relatively to the plow-beam, the opening 11 therein is flared or widened upwardly, the lower end of said opening being approximately of the diameter of the bolt 12, while the upper end of the opening is longitudinally elongated.

The plow standard or stock is also provided with an integrally-formed arm 13, which inclines rearwardly and upwardly, the extremity of said arm being projected behind the cuff 3 and extended in the arc of a circle, of which the perforation or opening 11 in the rocker is a center. Adjacent to its extremity the arm 13 is formed with a vertically-elongated slot 14, which is adapted to receive the bolt 5, hereinabove referred to, said slot permitting the arm 13 to be adjusted vertically relatively to the cuff and to the rear end of the plow-beam. The inner or forward face of the arm 13 is serrated or formed with a series of notches or depressions 15, which correspond in shape to and are adapted to receive the rib or projection 7 on the cuff.

By means of the construction above described it will be seen that the plow standard or stock may be rocked upon the head of the bolt 12 and against the lower face of the plow-beam by moving the arm or extension 13 up and down, and when the same is adjusted to the desired angle and the rib or projection 7 is engaged with the desired notch or depression in the arm 13 the parts may be firmly clamped in their adjusted positions by means of a retaining-nut and washer on the bolt 5. In this manner the angle of the plow-stock may be adjusted at will for adapting the plow to operate at greater or less depth in the soil.

The sweeper attachment comprises an oppositely-disposed pair of sheet-metal plates 16, which are preferably concaved slightly on their forward faces and connected at their inner adjacent ends to a head-piece 17, said plates or sweepers being extended laterally and rearwardly in a manner adapting them to level off the loose soil. The head 17, to which the sweepers are attached, is secured to the lower connecting portion between the uprights of the plow-stock by means of a vertical bolt 18, passing through said connecting portion and the head 17. When this sweeper attachment is employed, the moldboard 19 can be removed by unscrewing a single nut, which will allow the laterally-projecting threaded stud of said moldboard to be withdrawn from a perforation 20, provided therefor in the forward upright of the plow-stock, in a manner that will be readily understood by those familiar with the art to which this invention appertains.

I am aware that it is not new to provide means for adjusting the angle of a plow stock or standard with relation to its beam. This invention simply contemplates providing superior means for accomplishing the end re-

ferred to, and this is done by arranging the rocking head 9 beneath the plow-beam, by fitting the metal cuff 3 upon the rear end of the plow-beam and projecting the arm or extension 13 of the plow-stock in rear of said cuff, and engaging said arm with the cuff in the particular manner described. When the plow is in operation in the field, there will be a constant upward pressure of the plow-stock beneath the beam. This upward pressure is provided for by arranging the rocker beneath the plow-beam and passing the securing-bolt 12 upward through the rocker and plow-beam. Such construction is a decided advantage over the arrangement wherein the forward portion of a plow stock or standard is pivotally connected with the beam by means of a horizontal bolt, in which latter construction the strain is thrown entirely upon the projecting ends of such bolt, which soon results in breaking the same or causing said bolt to wear its way through a wooden beam. Furthermore, the cuff, embracing as it does the rear end of the plow-beam, effectually prevents the beam from splitting and locates the means for adjusting the plow-stock in the most convenient position for the attendant.

Parts of the plow not particularly hereinabove described may be constructed and arranged in any desired manner.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. In a plow, the combination with the plow-beam, of a stock formed with a rocker having a vertical perforation, a securing-bolt passing upwardly through said rocker and the plow-beam, and a segmental arm or extension of said stock curved in the arc of a circle of which the point upon which the stock rocks is a center, said arm being arranged in rear of said rocker and capable of being adjusted across the rear end of the plow-beam and clamped thereto, substantially as and for the purpose specified.

2. In a plow, the combination with the plow-beam, of a U-shaped cuff embracing the rear end thereof and provided with a perforation in its central or connecting portion, a rearwardly-projecting rib formed integrally with said cuff, a plow-stock connected with the plow-beam so as to be capable of being adjusted as to its angle, and an upwardly-projecting arm or extension formed integrally with the plow-stock and having its forward inner face serrated or formed with a series of notches or depressions for engaging the rib or projection on the cuff, and also formed with a vertically-elongated slot for the reception of a bolt which also passes through the perforation in the cuff, all arranged for joint operation substantially as described.

3. In a plow, the combination with the plow-beam, of a U-shaped metal cuff secured to and embracing the rear end of said beam and formed with a perforation and also with a rearwardly-projecting rib, a horizontal bolt

passing through said perforation and having
its head arranged inside of said cuff and
within a recess in the rear end of the plow-
beam corresponding in shape thereto for pre-
5 venting said bolt from turning, a plow-stock
having a swinging movement with relation
to the plow-beam, and an integrally-formed
arm or extension of said stock passing behind
the rear end of the plow-beam and formed
10 with a vertically-elongated slot for striding
said horizontal bolt and also provided in its

forward inner face with a series of notches
or depressions for engaging the rib or pro-
jection on the cuff, substantially as and for
the purpose set forth.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in
the presence of two witnesses.

EDWARD BRADFORD JAMES.

Witnesses:

HORACE BOUCHELLE,
J. D. STRINGER.