

(No Model.)

H. H. SATER.
PLOW BEAM.

No. 474,485.

Patented May 10, 1892.

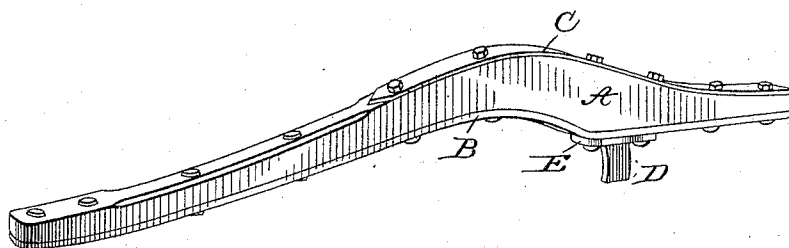


Fig. 1.

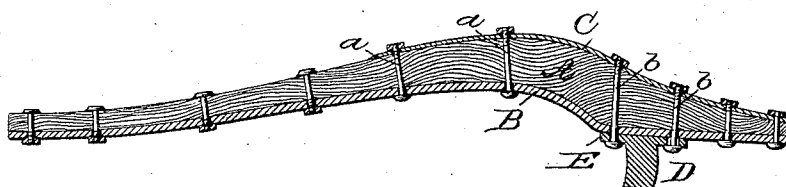


Fig. 2.

Witnesses:

James F. Duhamel
Horace A. Dodge.

Hans H. Sater.
Inventor:

By Dodge & Sons
Attys.

UNITED STATES PATENT OFFICE.

HANS H. SATER, OF MADISON, WISCONSIN.

PLOW-BEAM.

SPECIFICATION forming part of Letters Patent No. 474,485, dated May 10, 1892.

Application filed December 5, 1891. Serial No. 414,095. (No model.)

To all whom it may concern:

Be it known that I, HANS H. SATER, a citizen of the United States, residing at Madison, in the county of Dane and State of Wisconsin, have invented certain new and useful Improvements in Plow-Beams, of which the following is a specification.

My invention relates to plow-beams; and it consists in a novel construction of the same, as hereinafter set forth and claimed.

Plow-beams have heretofore been made of wood and also of iron, and in some instances wood and iron have been combined.

In the manufacture of plow-beams it is desirable to arch or curve the beam, so as to give the necessary space for clearance of the furrow, grass, weeds, &c., and this result has been attained heretofore by making the beam wholly of iron. While the iron beam thus possesses the requisite clearance, its cost and weight become objectionable features, and have interfered materially with its general application to the cheaper and lighter styles of plows. To overcome these difficulties it has been proposed to use a wooden beam; but owing to the fact that the grain of the wood runs lengthwise of the beam, these wooden beams have not been able to withstand the strains to which they are subjected, and generally split at a slight distance above the top of the plowshare. I propose to overcome the objections existing against the forms of beams heretofore employed and to combine in a beam the strength of the iron with the lightness and cheapness of the wood, and at the same time produce as an improved article of manufacture a plow-beam capable of application to various styles of plows, and comprising in its construction a suitably curved or arched wooden body portion, and a metallic strap applied to the upper or the lower, or both the upper and lower, faces of the wooden beam.

In the drawings, Figure 1 is a perspective

view of my improved plow-beam; Fig. 2, a vertical longitudinal sectional view of the same.

To attain the above result, I cut out or arch the wooden portion A of the beam to give the necessary curvature, with the grain of the wood running longitudinally of the beam. To this is permanently secured, by means of bolts *a*, the metal strap B, which fits closely to the under face of the portion A and extends the whole length of the same, while upon the upper face is secured a similar strap C, which extends only to a point a short distance in front of the curve or arch of the wooden portion A. It will be noticed that both the straps B and C conform closely to section A, and tend to keep the wood from splitting. On the under side, in rear of the curved portion of the beam, I secure the plow-standard D by passing the bolts *b b* through the respective portions B A C and then through the cap E of the standard. By this construction I obtain a plow-beam which is smaller than the ordinary wooden beam and lighter and cheaper than the cast beam. The upper strap may be omitted; but I prefer to employ it.

Having thus described my invention, what I claim is—

As an improved article of manufacture, the plow-beam herein shown and described, comprising the curved wooden beam A, the metal strap B, secured to the under side and extending substantially throughout its length, and the metal strap C, secured to the upper face of the beam and extending from a point in advance of the curved portion of the beam to the rear end thereof.

In witness whereof I hereunto set my hand in the presence of two witnesses.

HANS H. SATER.

Witnesses:

C. H. ALLYN,
W. R. BAGLEY.