

N. H. BLOOM.  
DRAFT BAR FOR AGRICULTURAL IMPLEMENTS.  
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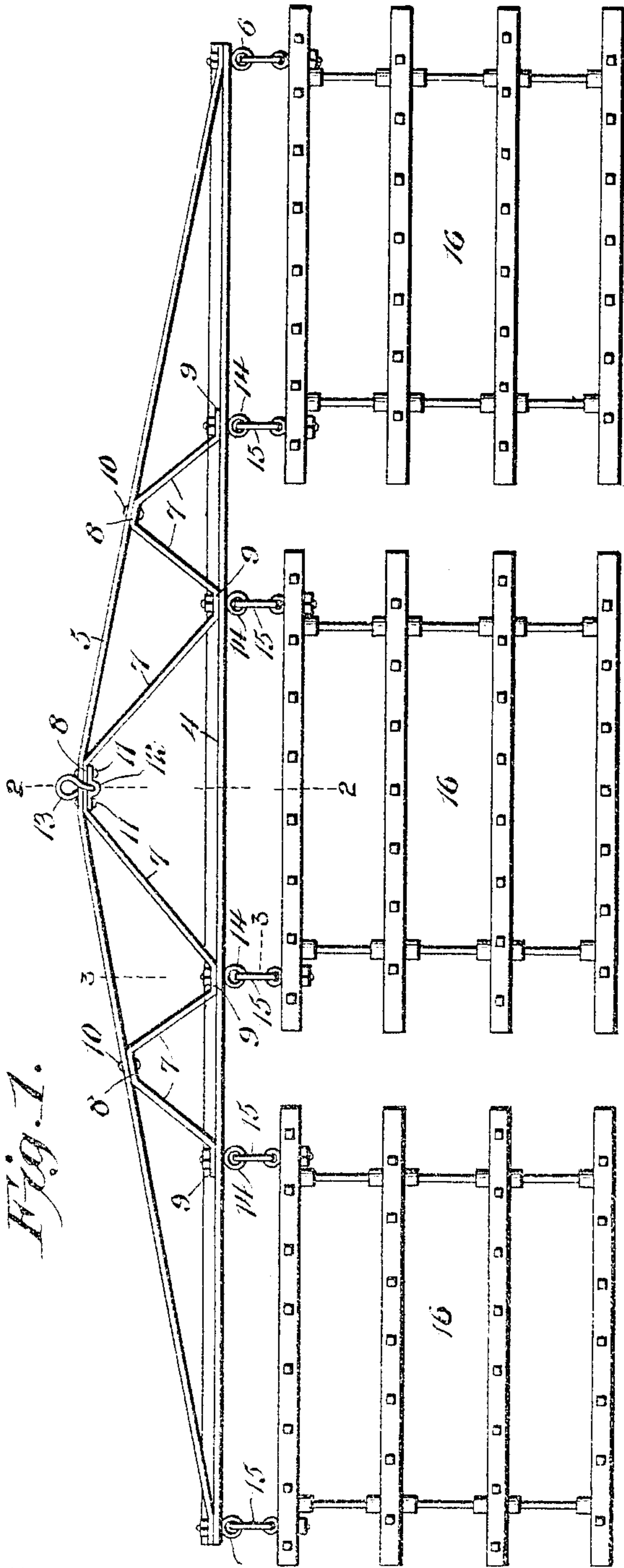


Fig. 1.

Fig. 3.

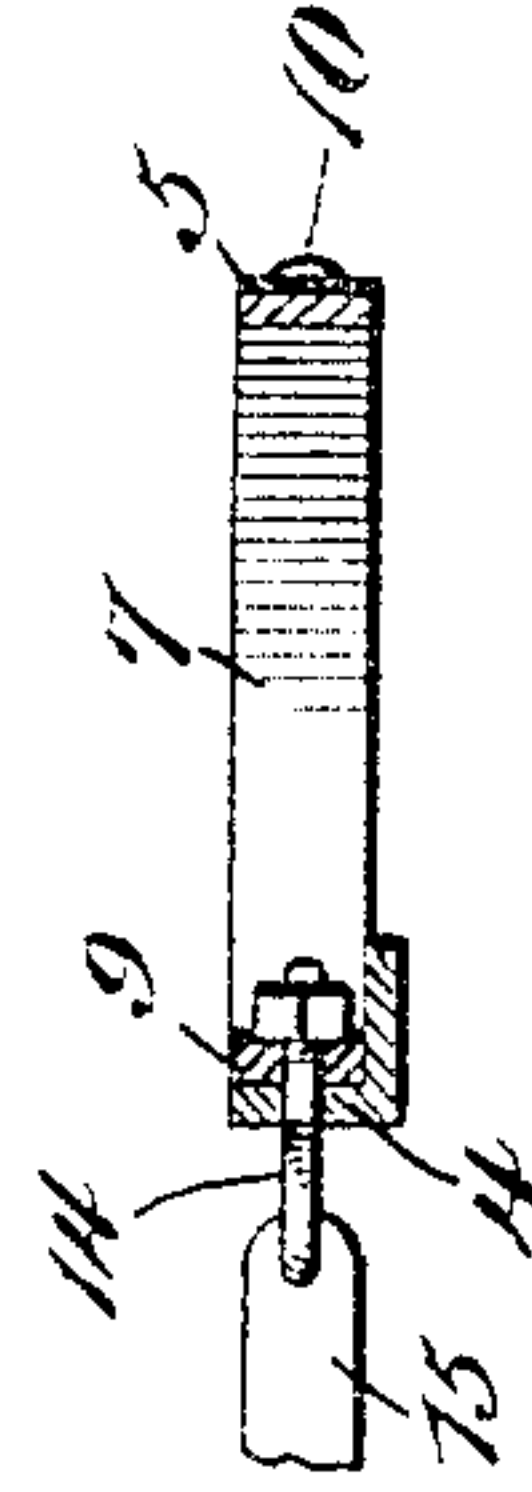
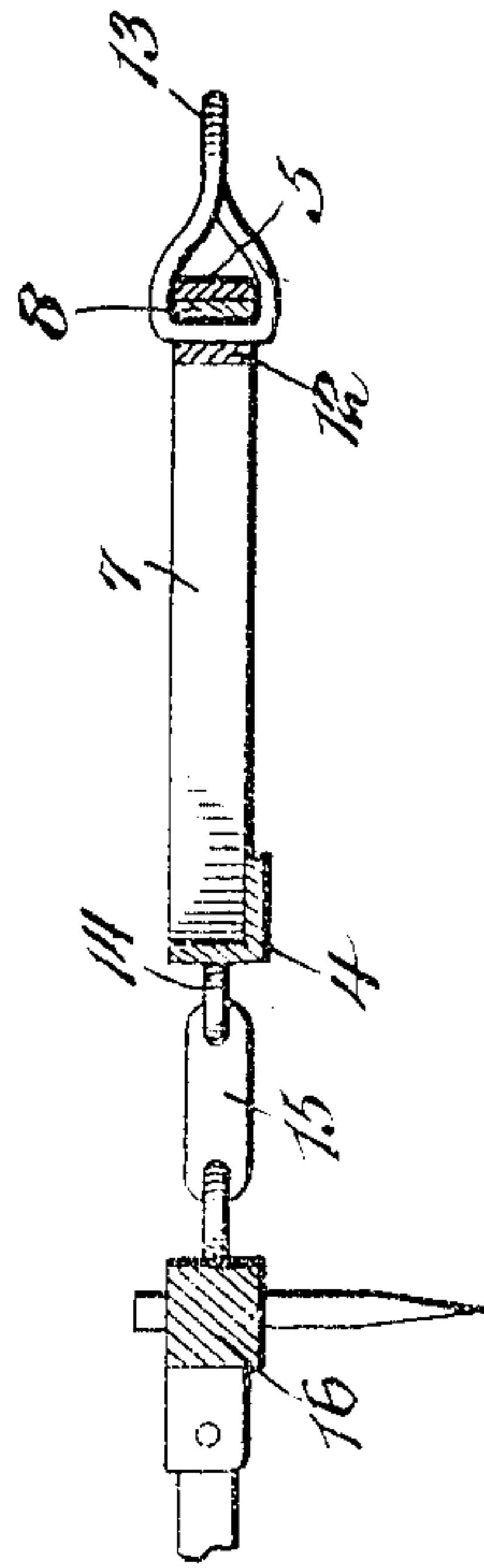


Fig. 2.



Witnesses  
Howard D. Orr.  
B. H. Foster.

Inventor.  
Nicklas H. Bloom,  
C. J. Siggers.  
Attorney



# UNITED STATES PATENT OFFICE.

NICKLAS H. BLOOM, OF NASHUA, IOWA.

## DRAFT-BAR FOR AGRICULTURAL IMPLEMENTS.

No. 804,703.

Specification of Letters Patent.

Patented Nov. 14, 1905.

Application filed June 7, 1905. Serial No. 264,114.

*To all whom it may concern:*

Be it known that I, NICKLAS H. BLOOM, a citizen of the United States, residing at Nashua, in the county of Chickasaw and State of Iowa, have invented a new and useful Draft-Bar for Agricultural Implements, of which the following is a specification.

This invention has particular reference to draft-bars for harrows and the like, though not necessarily limited in this respect.

The principal object is to provide a novel and exceedingly simple article of the above character that is strong, rigid, and durable, is very light in weight, and capable of being manufactured cheaply and of commercial stock.

The preferred embodiment of the invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a top plan view of the new draft-bar with a plurality of harrows coupled thereto. Fig. 2 is a sectional view on the line 2 2 of Fig. 1. Fig. 3 is a detail sectional view on the line 3 3 of Fig. 1.

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

In the embodiment illustrated a rear substantially straight longitudinal bar 4 of angle-iron is employed, and associated therewith is a front bar 5, preferably formed of flat-sided metal bent at its central portion and having its end portions disposed in convergent relation to the end portions of the rear bar 4. The ends of said bars are fastened together by eyebolts 6. Angularly-disposed braces 7 connect the intermediate portions of the bars 4 and 5, said braces being preferably formed from a single strip that extends back and forth between the bars and has flat portions 8 and 9 abutted, respectively, against the same. The flat portions 8 are connected to the front bar 5 by suitable devices—as, for instance, rivets 10—with the exception of the central one, which is located against the central portion of the bar 5 and is secured thereto by fixed rivets 11, said rivets fastening thereto a keeper 12, in which is located a coupling device in the form of a twisted link 13. Any device desired may be substituted for this link. The rear portions of the braces are connected to the rear bar 4 by eyebolts 14, which bolts are entirely separate from the front bar and lie in planes between the fastening devices 10 and 11.

In the eyes of the bolts 6 and 14 are con-

nected suitable links 15, by means of which a plurality of harrows 16 or other agricultural implements may be coupled to the draft-bar. In the present embodiment three of these harrows are shown. Consequently six eyebolts are provided; but it will be noted that the number is not limited and more or less may be employed, as desired, in which case the bracing structure will be varied accordingly.

It will be observed that the structure herein disclosed is very strong, rigid, and durable, yet light in weight. Furthermore, it can be cheaply manufactured, and the material thereof is well-known stock of commerce.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A rigid draft-bar for agricultural implements and the like comprising an open inflexible trussed frame, means carried by one side for attaching an agricultural implement thereto, and a coupling device connected to the opposite side.

2. A rigid draft-bar for agricultural implements, comprising longitudinally-disposed bars extending substantially the length of the same and having portions spaced apart, a brace located between the spaced portions of the bars, and a device for connecting the brace to one bar, said device being separate from the other bar and constituting means for attaching a coupling to the bar.

3. A draft-bar for agricultural implements, comprising continuous longitudinally-disposed bars, both end portions of which are convergently disposed, braces located between the intermediate portions of said bars, means for connecting the braces to each bar independently of the other bar, and coupling means associated with the bars.

4. A draft-bar for agricultural implements, comprising longitudinally-disposed bars, each bar extending continuously substantially the length of the draft-bar, both end portions of said bars being convergently disposed, angu-



larly-disposed braces located between the intermediate portions of said bars, devices for connecting the braces to each bar, said devices being respectively independent of the other bar, and coupling means associated with the bar.

5. A rigid draft-bar for agricultural implements, comprising continuous inflexible longitudinally-disposed bars, both end portions of said bars being convergently disposed, angularly-disposed braces located between the intermediate portions of said bars, devices for connecting the braces to each bar, said devices being respectively independent of the other bar, and coupling means connected to said devices.

6. In a draft-bar for agricultural implements, the combination with longitudinally-disposed bars, the end portions of which are convergently disposed, of angularly-disposed braces comprising a strip extending back and forth between the bars and separately connected to each, and coupling means associated with the draft-bar.

7. In a draft-bar for agricultural implements, the combination with a substantially straight bar, of a continuous, substantially rigid bent bar having its ends secured to the ends of the straight bar, braces connecting the intermediate portions of the bars, and coupling means associated with the straight bar.

8. In a draft-bar for agricultural implements, the combination with a single inflexible longitudinal bar formed of angle-iron, of a single continuous bent bar having its ends secured to the ends of said longitudinal bar, angularly-disposed braces connecting intermediate portions of the bars, a coupling de-

vice connected to the bent bar, and means for attaching harrows to the longitudinal bar.

9. In a draft-bar for agricultural implements, the combination with a rear bar of angle-iron, of a front bar having its ends secured thereto, a plurality of braces comprising a strip extending back and forth between the bars and abutted against the inner sides of the same, separate devices for connecting the abutted portions to each bar independently of the other bar, and coupling elements connected to certain of said devices.

10. In a draft-bar for agricultural implements, the combination with a substantially straight bar of angle-iron, of a bent bar, eyebolts securing the ends of the bars together, angularly-disposed braces comprising a strip extending back and forth between the bars, eyebolts connecting the strip to the angle-iron bar, links connected to said eyebolts, and a coupling device connected centrally to the bent bar at one of the junctures of the brace-strip therewith.

11. In a draft-bar for agricultural implements, the combination with a single rigid longitudinal bar formed of angle-iron, of a single bent bar having both ends secured to the ends of said longitudinal bar, and angularly-disposed braces connecting intermediate portions of the bars, said braces being secured to both bars.

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

NICKLAS H. BLOOM.

Witnesses:

W. B. SIMPON,

R. F. WENTWORTH.