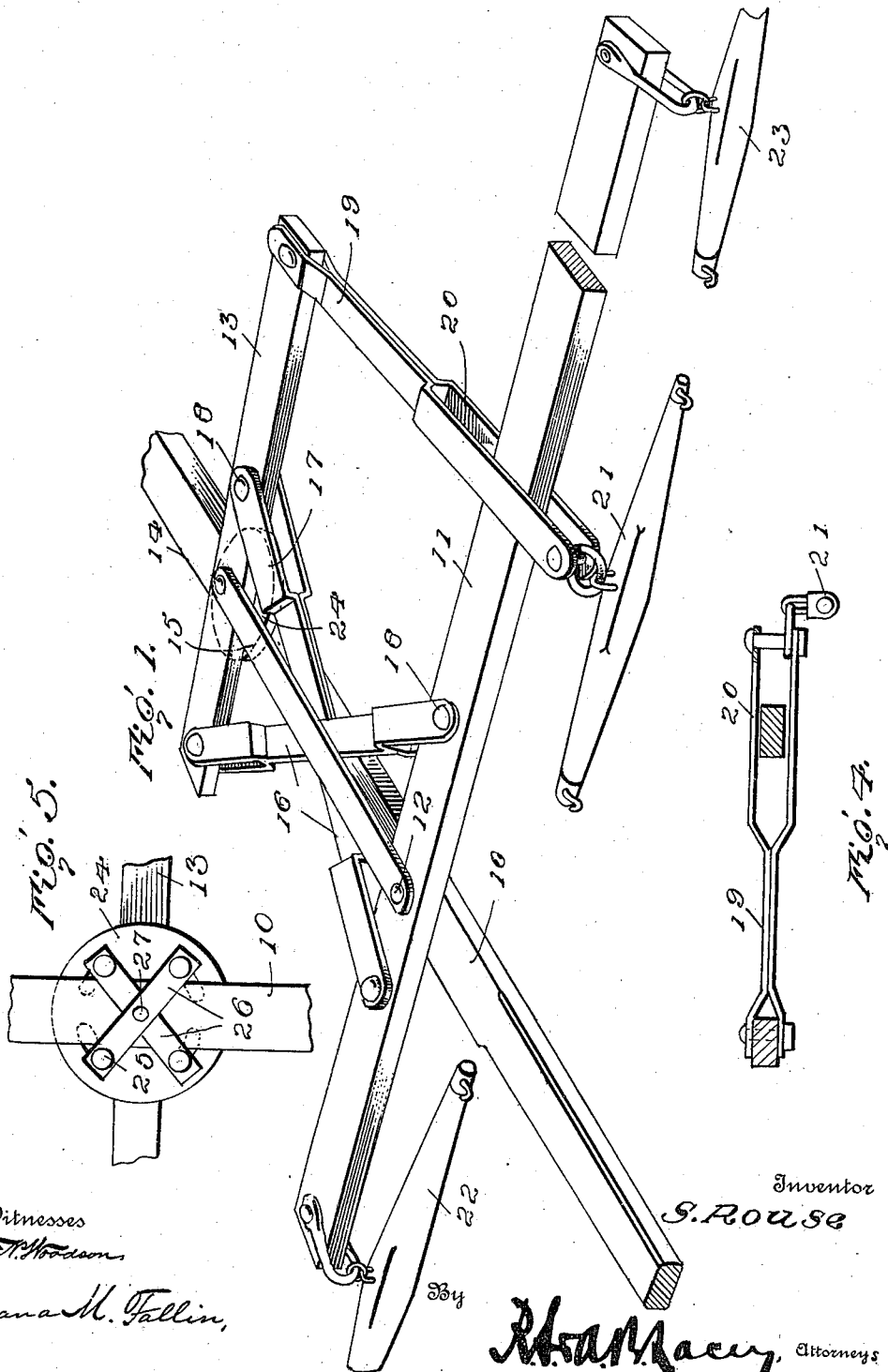


976,302.

S. ROUSE.
DRAFT DEVICE.
APPLICATION FILED DEC. 4, 1909.

Patented Nov. 22, 1910.

2 SHEETS—SHEET 1.



Witnesses
W. T. Hudson
J. M. Fallon,

Inventor
S. ROUSE

H. A. Macey, Attorneys

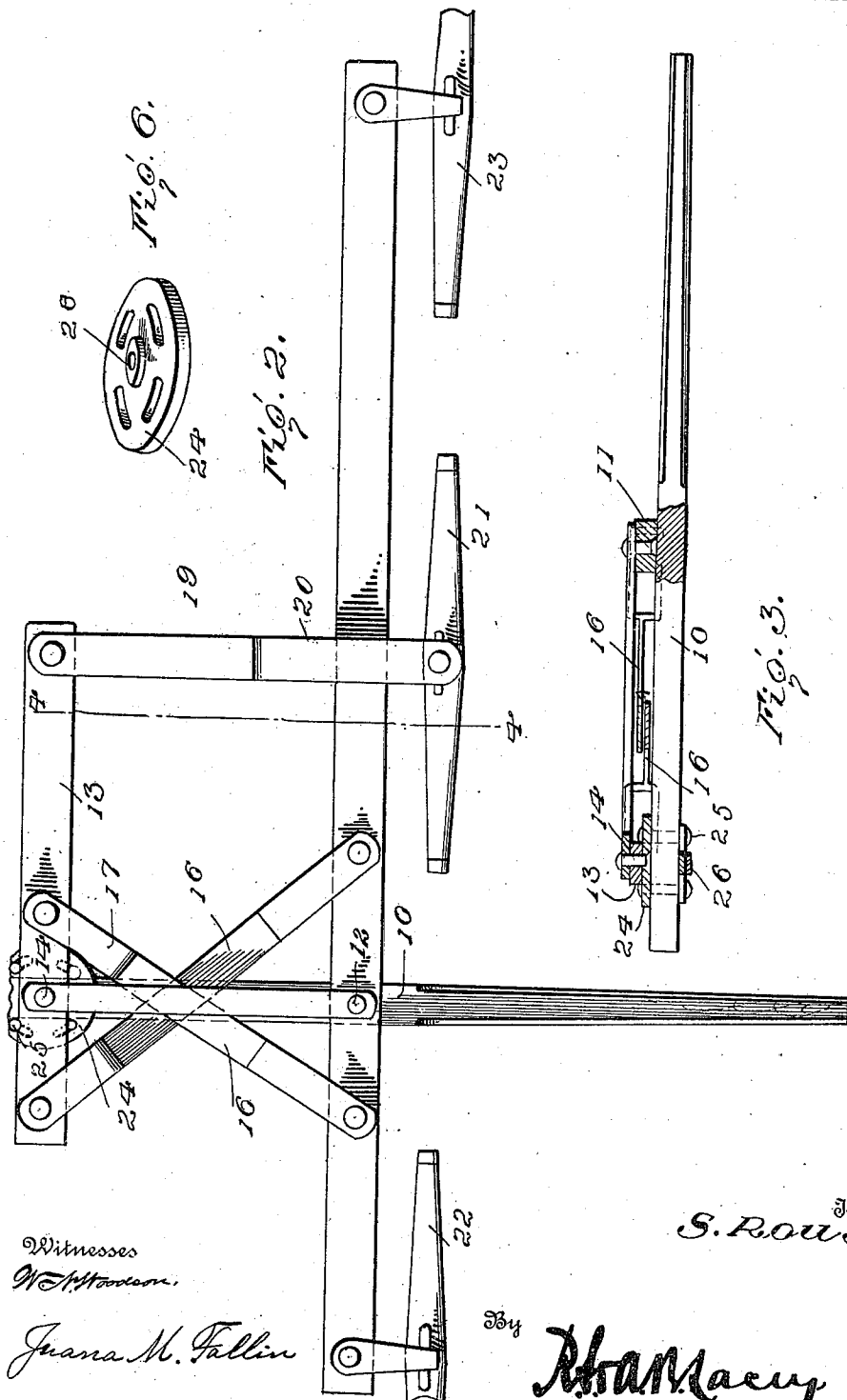
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UNITED STATES PATENT OFFICE.

SPENCER ROUSE, OF SAN SABA, TEXAS.

DRAFT DEVICE.

976,302.

Specification of Letters Patent.

Patented Nov. 22, 1910.

Application filed December 4, 1909. Serial No. 531,470.

To all whom it may concern:

Be it known that I, SPENCER ROUSE, citizen of the United States, residing at San Saba, in the county of San Saba and State of Texas, have invented certain new and useful Improvements in Draft Devices, of which the following is a specification.

This invention relates to draft devices and refers particularly to a device of this character for the attachment of three animals to the same.

An object of this invention is to form a device of this character which is applicable to tongues of ordinary construction and which will not necessitate the peculiarly forming of the tongues or of the weakening of the tongues of common form for the attachment of the device, but which will strengthen the tongue to provide the same with means whereby it is more capable of withstanding the draft which is applied to the same.

The invention comprises a draft device formed of a splinter-bar, with swingle trees at its opposite ends, pivoted adjacent one of its ends upon a tongue; a third swingle tree being employed which is provided with a system of levers to connect it to the splinter-bar at each side of the center thereof, so as to take up the draft from the long and short arms of the splinter bar.

The invention has for a still further object the provision of a draft device which is capable of longitudinal adjustment along the wagon tongue to accommodate various conditions arising in implements and wagons which are to be drawn.

For a full understanding of the invention reference is to be had to the following description and accompanying drawings in which:—

Figure 1 is a perspective view of the complete device as applied to a tongue. Fig. 2 is a top plan view of the same. Fig. 3 is a longitudinal central section through the tongue having the draft device applied thereto. Fig. 4 is a section on the line 4—4 of Fig. 2. Fig. 5 is a bottom plan view of the adjustable clamping plate employed, and Fig. 6 is a sectional perspective view of the clamping plate.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawings the numeral 10

designates a tongue which is of common formation. Loosely supported across the upper flattened face of the tongue 10 is a splinter-bar 11 carrying a bolt 12. The tongue 10 further carries a transfer bar 13 which is loosely disposed thereacross and spaced inwardly upon the tongue 10 from the splinter-bar 11. The transfer bar 13 carries a rear bolt 14. The splinter-bar 11 and the transfer bar 13 are retained in spaced relation through the medium of a reach-bar 15 which is pivotally engaged at its opposite ends by the bolts 12 and 14 respectively, which retain the bolts in spaced relation and at the same time permit the free relative movement of the splinter-bar and the transfer bar.

The tongue 10 carries upon its upper face a circular plate 24 having four spaced arcuate slots for the reception of a corresponding number of bolts 25 which depend against the opposite edges of the tongue 10 and terminate in cross-bars 26. The bars 26 are crossed at substantially right angles at their central portions and are held pivotally in such relation by a pin 27. A boss 28 is formed centrally upon the upper face of the plate 24 upon which rests the transfer bar 13, and through which is upwardly extended the bolt 14.

It will be particularly noted from Fig. 3 that the bolt 14 is carried only by the plate 24 and that it does not penetrate the tongue 10. This construction does not weaken the tongue 10 by the formation of an aperture therethrough, but reinforces that portion thereof by the positioning of the bolts 25. The plate 24 and the bolts 25 admit of the longitudinal adjustment of the entire draft device relative to the tongue as the device is supported upon the plate 24.

It will be observed from Fig. 2 that the point of pivotal support of each of the bars 11 and 13 is disposed inwardly from one end thereof at a distance equal approximately to one-fourth of the length thereof. The transfer bar 13 is connected to the splinter-bar 11 by the provision of a pair of crossed straps 16 which are pivotally connected to the respective bars so as to show the pivotal point of contact between the same with respect to the bolts 12 and 14 which support the bars. In this manner the transfer bar 13 is given an opposite movement to the splinter-bar 11 for a purpose which will be hereinafter set forth. The straps 16 each

comprise lengths of metal which are flattened and provided with yokes 17 at their opposite extremities which straddle the bars 11 and 13 and are pivotally supported in such position through the medium of rivets 18, or the like. The outer extremity of the transfer-bar 13 carries an arm 19 which is pivotally mounted thereon and which extends forwardly. The forward end of the arm 19 is provided with an elongated yoke 20 which engages about the splinter-bar 11 and admits of the free movement of the splinter-bar within the same. The yoke 20 carries a swingletree 21 upon its forward extremity. The splinter-bar 11 is provided with swingletrees 22 and 23 upon its opposite extremities which act in conjunction with the swingletree 21 to distribute the draft proportionately to the draft animals employed.

In connecting the straps 16 to the splinter-bar 11 and the transfer bar 13 it will be noted that the rear ends of the straps 16 are spaced from the bolt 14 at distances which are less than the distances between the rivets 18 engaged through the splinter-bar 11 and the bolt 12. When a greater draft is effected through the swingletree 21 relative to the remaining swingletrees 22 and 23, the splinter-bar 11 is swung about the bolt 12 to move the long arm thereof into a backward position. This movement is produced by the swinging of the transfer bar 13 about the pin 14 to draw backwardly the upper strap 16 which is connected at its ends to the short arm of the transfer bar 13 and to the long arm of the splinter bar 11. This backward movement of the long arm of the splinter bar 11 is further effected by the draft through the swingletree 22. The tree 22 draws the short arm of the splinter bar 11 forwardly to swing the same about the bolt 12. The lower strap 16, which is connected at its forward end to the short arm of the splinter bar 11, draws the long arm of the transfer bar 13 forwardly to further the draft upon the short arm of the transfer bar 13 and upon the upper strap 16. The swingletree 23 is distanced upon the long arm of the splinter bar 11 from the bolt 12 sufficiently to offset the backward draft upon the long arm of the splinter bar and to thereby create a tendency to maintain the three swingletrees 21, 22 and 23 in transverse alinement.

In the construction of this draft device it will be noted that the operative parts including the straps and the bars are so ar-

ranged that they may be formed of considerable thickness and given the required weight for attachment to heavy devices which are to be drawn.

Having thus described the invention what is claimed as new is:—

1. A draft device including a plate for adjustable engagement upon a tongue and having arcuate slots formed in spaced relation therethrough, bolts positioned in the slots and depending from said plate, cross-bars carried upon the lower ends of the bolt for engagement beneath the tongue to retain the plate in position, said plate having a boss formed centrally upon its upper face, a pin upwardly extending through the plate and the boss, a transfer bar pivoted adjacent one end upon said pin, a reach bar carried by the pin and extending forwardly therefrom, a splinter-bar pivoted upon the forward end of said reach-bar adjacent one end of the splinter bar, cross-straps pivoted upon said transfer bar and said splinter bar at points spaced oppositely from the pivotal centers of said bar, an arm carried upon the long arm of said transfer bar and extending forwardly of said splinter bar, and swingletrees disposed upon the ends of said splinter-bar and said forwardly extending arm.

2. A draft device including a reach-bar, draft bars pivoted adjacent their ends to the extremities of the reach-bar, a plate carried at the rear end of the reach-bar for adjustable engagement upon a tongue, a cross-bar carried by said plate for engagement beneath the tongue to clamp the plate thereto, cross-straps pivoted at their ends upon said draft bars in spaced relation from the pivotal centers thereof to transfer the draft therebetween, and swingletrees connected to the opposite ends of the forward of said draft bars and the long arm of the rear of said draft bars.

3. A draft device including a draft bar, a plate for supporting the bar having spaced arcuate slots formed therein, depending bolts carried by the plate to engage against the opposite edges of the tongue, and cross-bars carried upon the lower ends of said bolts for engagement against the under face of the tongue.

In testimony whereof I affix my signature in presence of two witnesses.

SPENCER ROUSE. [L. s.]

Witnesses:

Y. F. SQUIER,
F. E. ESTEP.