(No Model.)

R. ECCLES.

COUPLING FOR SLEIGHS.

No. 458,103. Patented Aug. 18, 1891.

Fig 1

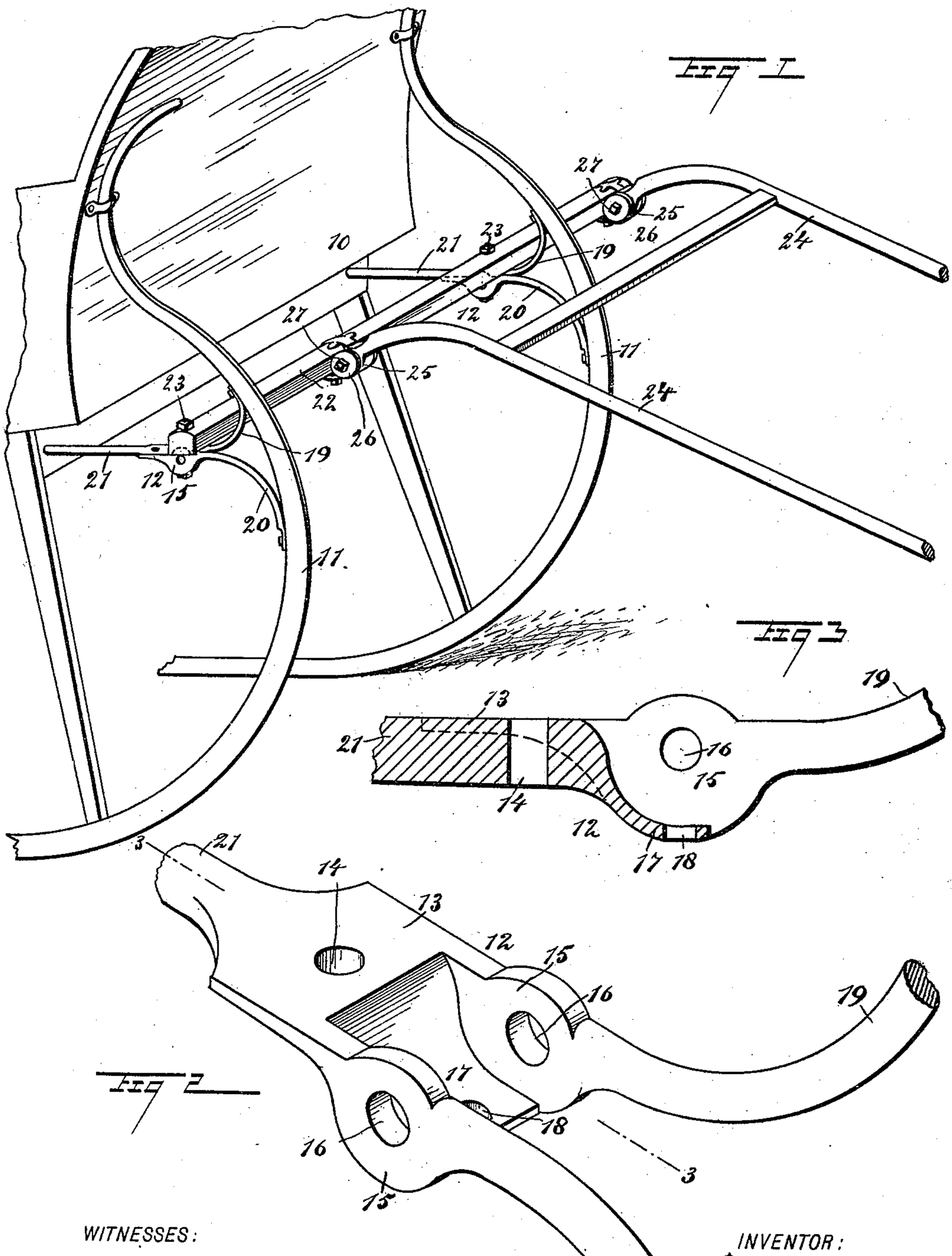

Fig 3

Fig 2

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RICHARD ECCLES, OF AUBURN, NEW YORK.

COUPLING FOR SLEIGHS.

SPECIFICATION forming part of Letters Patent No. 458,103, dated August 18, 1891.

Application filed April 17, 1891. Serial No. 389,333. (No model.)

To all whom it may concern:

Be it known that I, RICHARD ECCLES, of Auburn, in the county of Cayuga and State of New York, have invented a new and Improved Thill-Coupling for Sleighs, of which the following is a full, clear, and exact description.

My invention relates to improvements in thill-couplings for sleighs. In countries where much snow falls shifting-bars are used, so that for single-horse sleighs the horse will travel a little to one side instead of directly in front of the sleigh, in order to make the sleigh follow the track in the road, as the road is usually made by pairs of horses, so that an ordinary sleigh will not follow the track unless the horse is driven between the two beaten paths.

The object of my invention is to produce a simple, durable, and strong thill-coupling to which the thills of a sleigh may be easily attached, and which is also adapted to form a support for the shifting-bar, and is constructed in such a manner that the thills may be easily changed from the shifting-bar to the couplings.

To this end my invention consists in a thill-coupling constructed substantially as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a broken perspective view of a sleigh provided with the couplings embodying my invention. Fig. 2 is a broken enlarged perspective view of one of the couplings, and Fig. 3 is a broken longitudinal section of the same on the line 3 3 of Fig. 2.

The sleigh 10 is of common form, and is provided with the usual runners 11, which are curved up in front of the sleigh and converge toward the top. These runners are provided with the couplings 12, and each coupling is provided with a flat top portion 13, which is somewhat thin at the edges and thickened in the middle, and has also a vertical perforation 14 extending through it. The sides of the coupling are formed by the collars 15, the upper portions of which are curved above the flat surface 13, and these collars are provided with transverse perforations 16, which are adapted to receive the coupling-bolt in the manner hereinafter described. A recess is thus formed between the two collars 15, and the bottom of the recess is formed by the curved web 17, which unites the lower portion of the collars and which extends rearward and merges in the flat portion 13. This web 17 has a bolt-hole 18 extending vertically through it. The collars or side pieces 15 terminate in front in braces 19 and 20, the brace 19 being curved upwardly and secured to a runner 11, and the brace 20 being curved downwardly and secured to the runner, as best shown in Fig. 1. The coupling will thus be braced in two directions, and as an additional brace the part 13 is reduced and elongated, as shown at 21, and this portion is firmly secured to the sleigh-body.

The shifting-bar 22 is of the common form and extends transversely across the couplings 12, one end extending beyond one side of the sleigh, and the shifting-bar is secured to the couplings by means of the bolts 23, which extend downward through the bar and through the holes 18 in the webs 17 of the couplings. When the bar is applied, it is gouged out slightly at the points opposite the couplings, so that the projecting upper surfaces of the collars 15 will enter the gouged part of the bar and prevent the bar from slipping. This is shown by dotted lines in Fig. 1.

The thills 24 are provided with the usual knuckles 25 at their rear ends, and these are secured in common couplings 26, which are attached to the shifting-bar. If desired, the shifting-bar may be placed a little farther back and may be bolted to the flat portion 13 of the couplings, the bolts 23 being made to extend downward through the perforations 14. When the shifting-bar is not used, it is removed from the couplings, the bolts 27 are removed from the couplings on the bar in the ordinary way, and the knuckles 25 of the thills are placed between the collars 15 of the couplings, and the bottom and back portion of the knuckles will rest on the web 17. The bolts 27 are then thrust through the perforations 16 of the couplings and the holes in the knuckles 25, and are then fastened in place. It will thus be seen that the thills may be very quickly and easily changed, and it will be noticed that as the knuckles 25 are held

between the collars 15 the strain will be removed from the coupling-bolt and there will be very little chance for play.

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

1. A thill-coupling comprising a bar vertically apertured and provided with transversely apertured and spaced ears, each extended to form a brace, one of which is curved upwardly and the other downwardly, substantially as described.

2. In a thill-coupling, a bar having a flat top portion 13, vertically apertured at 14 and provided with the spaced collars 15, connected by the curved web 17, apertured at 18, and with the oppositely-curved braces 19 and 20 projecting from the collars, substantially as herein shown and described.

RICHARD ECCLES.

Witnesses:
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