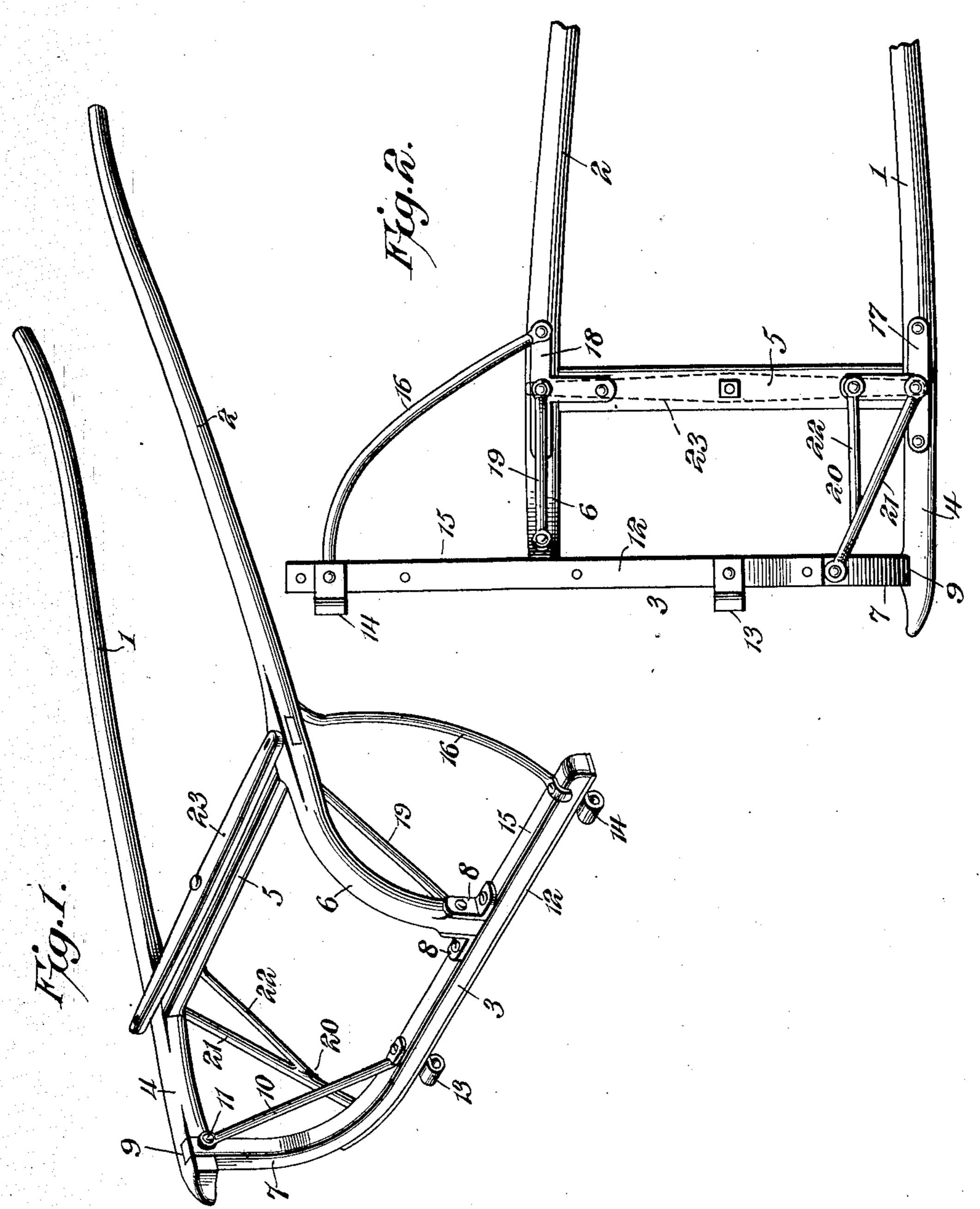
M. D. SCHALLER.

THILL FOR SLEIGHS.

APPLICATION FILED MAY 29, 1906.



Michael D. Schaller, Inventor,

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Attorney

Witnesses

To They

THE NORRIS PETERS CO., WASHINGTON, D. C.

## UNITED STATES PATENT OFFICE.

MICHAEL D. SCHALLER, OF VERNON CENTER, NEW YORK.

THILL FOR SLEIGHS.

No. 860,250.

Specification of Letters Patent.

Patented July 16, 1907.

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To all whom it may concern:

Be it known that I, MICHAEL D. SCHALLER, a citizen of the United States, residing at Vernon Center, in the county of Oneida and State of New York, have invented a new and useful Thill for Sleighs and Cutters, of which the following is a specification.

The invention relates to improvements in thills for sleighs and cutters.

The object of the present invention is to improve the construction of thills for sleighs and cutters, and to provide a pair of thills of simple and efficient construction adapted, when sleighs or cutters pass each other, of effectually preventing the same from colliding or locking.

A further object of the invention is to provide a pair of thills, which, should the sleighs or cutters contact in passing each other, will operate as a guard for preventing the said sleighs or cutters from becoming locked.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claims hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing:—Figure 1 is a perspective view of a pair of thills constructed in accordance with this invention. Fig. 2 is a reverse plan view of the same.

Like numerals of reference designate corresponding parts in all the figures of the drawing.

1 and 2 designate a pair of thills, which are offset from the center of a cutter or sleigh by means of a rear transverse bar 3. The left hand or off thill 1 is arranged 35 horizontally, and is provided with a straight rear portion 4. The right hand or inner thill 2, which is connected with the left hand or off thill 1 by a whiffletreesupporting cross bar 5, has its rear portion 6 curved downwardly and rearwardly and secured to the rear transverse bar 3, which is located below the plane of the body portion of the thills, and which is provided at its left hand end with an upwardly and outwardly curved arm 7. The rear end of the inner or right hand thill is secured to the rear transverse cross bar by means of suit-45 able L-shaped plates or knees 8, located at opposite sides of the downwardly curved portion 6 and secured to the same and to the rear transverse bar. The upper terminal of the arm 7 of the rear transverse bar is secured to the straight rear portion 4 of the off or left hand thill 50 in a recess or mortise 9, and the curved arm 7 is supported by an inclined transversely disposed bracing rod 10, having terminal eyes or perforations and extending from the upper end of the arm 7 to a point beyond the lower end thereof. The terminal eyes or perforations of 55 the bracing rod receive suitable fastening devices 11; one of the fastening devices 11 pierces the bar 3, and the other fastening device 11 serves to secure the arm 7 to the straight rear portion 4 of the thill 1. The rear transverse bar 3 is reinforced by a metallic strap or plate 12, secured to the lower face of the said transverse bar 3, 60 and carrying suitable coupling eyes 13 and 14 to enable the thills to be connected to an ordinary one horse sleigh or cutter.

The rear transverse bar extends laterally beyond the inner or right hand thill 2 to provide an arm 15, 65 which carries the coupling eye 14. The arm 15 is braced by an inclined rod 16, extending forwardly and upwardly from the said arm 15 to the inner or right hand thill and secured to the same in advance of the cross bar 5. The cross bar 5 is connected at its ends 70 with the thills by means of T-shaped plates 17 and 18, which have their opposite arms arranged longitudinally of the thills. The other arm of each of the T-shaped plates is extended inwardly, and is secured to the cross bar 5 at the lower face thereof. The upper end of the 75 brace 16 is secured to the forwardly extending arm of the T-shaped plate 18, and its lower end is arranged upon the upper face of the arm 15, and is extended downwardly at the rear face thereof to brace the same. The downwardly curved portion of the inner or right 80 hand thill is braced by an inclined longitudinally disposed rod 19, provided with terminal perforations or eyes, and secured to the thill 2 at the ends of the curved portion 6. The left hand thill is supported by an inclined brace 20, secured at its lower end to the 85 lower face of the transverse bar 3 at the lower end of the arm 7, and provided with a forked upper portion having upwardly diverging arms 21 and 22, which are secured to the thills and to the cross bar 5 at the inner and outer terminals of the transverse arm of the T- 90 shaped plate 17. A whiffletree 23 is pivotally mounted on the cross bar 5 and is adapted to receive the traces in the ordinary manner.

The thills, when coupled to a sleigh or cutter, are laterally offset from the median line of the same, and 95 it will be apparent that when two sleighs or cutters pass each other to the right, they will be effectually prevented from colliding and becoming locked. Should, however, the thills of one sleigh or cutter collide with the other, the straight left hand thill 1, the 100 inclined forked brace and the upwardly extending arm, will operate as a guard for preventing the thills from becoming locked.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, 105 is:—

1. The combination of a pair of thills, one of the thills terminating in a straight rear extension disposed longitudinally of the thill, and the other thill having a downwardly curved rear portion, and a rear transverse bar located below the plane of the thills and secured at an intermediate point to the downwardly extending rear portion of one of the thills and having an upwardly extending arm

secured to the straight rear portion of the other thill, and

coupling means carried by the transverse bar.

2. The combination of a pair of thills, one of the thills terminating in a straight rearwardly extending portion, and 5 the other thill being curved downwardly, a rear transverse bar located below the plane of the thills and secured at an intermediate point to a downwardly curved portion of one of the thills and extending therefrom to form a laterally projecting arm, said transverse bar being also provided 10 with an upwardly curved arm secured to the straight rear for supporting a whiffletree, and coupling means carried

portion of the other thill, a cross bar connecting the thills

by the transverse bar.

3. The combination of a pair of thills, one of the thills 15 being provided with a straight rear portion, and the other thill being curved downwardly, a rear transverse bar secured to the downwardly curved portion of one thill and having an upwardly curved arm secured to the straight rear portion of the other thill, and an inclined brace extending from

the lower end of the said upwardly curved arm to the ad- 20 jacent thill at the front end of the straight rear portion thereof and cooperating with the straight rear portion and the said arm to form a guard.

4. The combination of a pair of thills, one of the thills having a straight rear portion and the other being curved 25 downwardly, a transverse bar secured to the downwardly curved portion of one thill and having an upwardly curved arm secured to the straight rear portion of the other thill, an inclined brace secured to the transverse bar at the ends of the upwardly curved arms, and inclined braces extend- 30 ing from the transverse bar to the thills.

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

witnesses.

MICHAEL D. SCHALLER.

Witnesses: HARRY REEVES WESSELL, CLARA F. EARL.