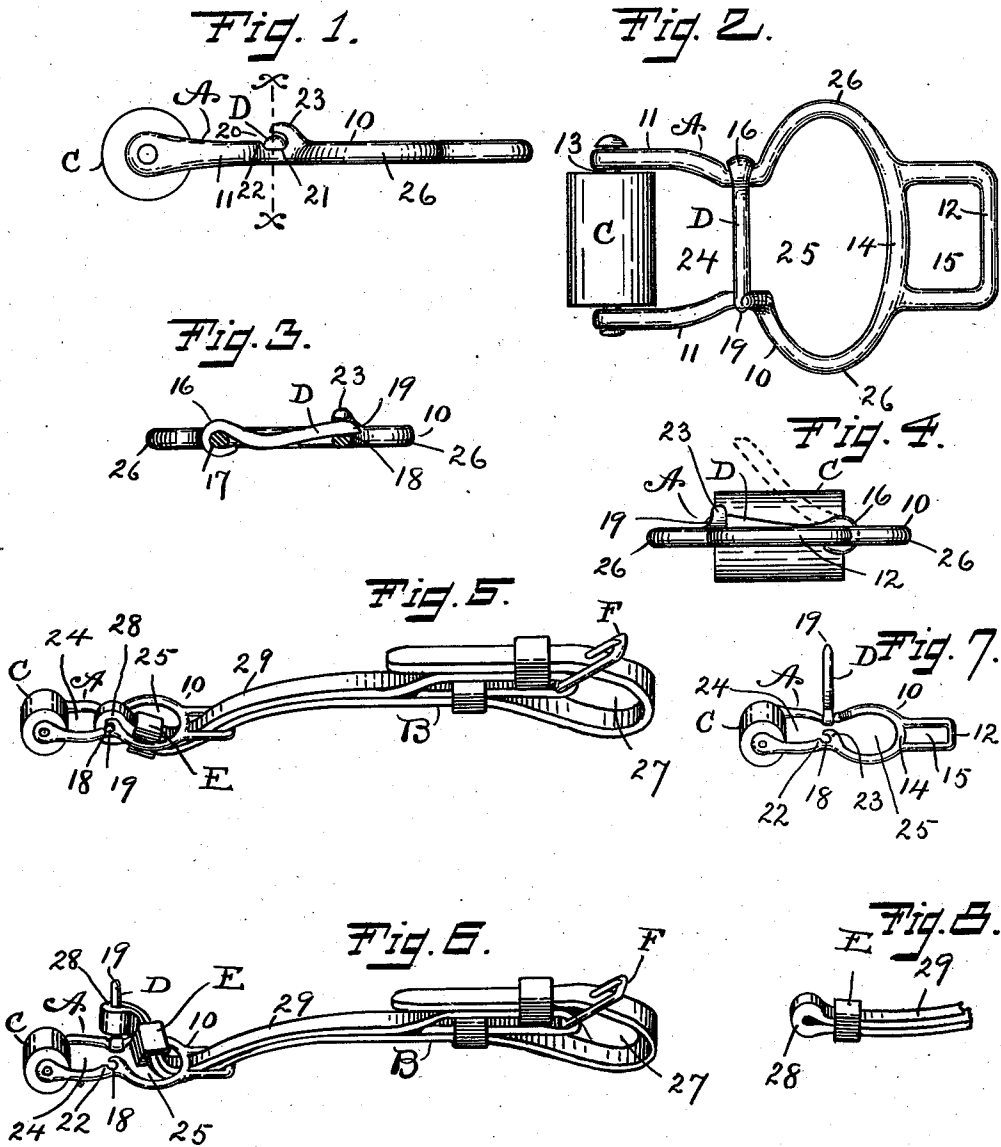


J. E. MELCHIOR.
SPREAD ROLLER.
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1,014,769.

Patented Jan. 16, 1912.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOSEPH E. MELCHIOR, OF DES MOINES, IOWA, ASSIGNOR OF ONE-HALF TO NORTH AND JUDD MANUFACTURING COMPANY, OF NEW BRITAIN, CONNECTICUT, A CORPORATION.

SPREAD-ROLLER.

1,014,769.

Specification of Letters Patent.

Patented Jan. 16, 1912.

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To all whom it may concern:

Be it known that I, JOSEPH E. MELCHIOR, a citizen of the United States, residing at Des Moines, in the county of Polk and State of Iowa, have invented certain new and useful Improvements in Spread-Rollers, of which the following is a specification.

My invention relates to improvements in spread rollers, and the objects of these improvements are simplicity and economy in construction and convenience and efficiency in use.

In the accompanying drawing: Figure 1 is a side elevation of my improved spread roller. Fig. 2 is a plan view of the same. Fig. 3 is a sectional view of the same on the line $x-x$ of Fig. 1. Fig. 4 is an end view of the same, the position of the tongue in one of the open positions being indicated by broken lines. Fig. 5 is a perspective view on a reduced scale of the same and the supporting strap. Fig. 6 is a similar view of the same, showing the tongue in open or tilted position. Fig. 7 is a similar view of the spread roller with the strap detached. Fig. 8 is a similar view of the end of the strap support that engages with the tongue.

A is my spread roller complete and B the supporting strap. The said spread roller A comprises a body or frame 10 having a pair of side bars 11, which are cross-connected at one end by a cross bar and at the other end by a shaft 13 for a rein roller C. Intermediate the said ends the said side bars 11 are cross-connected adjacent the said first end by an integral bridge 14 which provides an eye 15 between the said end cross bar 12 and bridge 14. Adjacent the said shaft 13 and rein roller C the said bars 11 are cross-connected by a pivotal tongue D. The pivotal connection of the said tongue D consists of an eye 16 in one end thereof engaged with a bearing 17 provided therefor on one of the said side bars 11. The other or mating side bar 11 is provided with a socket 18 suitable for receiving the nose 19 of the said tongue D. The said socket 18 fits the nose 19 and is preferably formed on the lower side by a downward bend 21 in the bar 11 and in the upper side the mouth 20 comprises a relatively small lug 22 on the side toward the roller C, and on the side remote from the said roller and toward the eye 15 there is a lug 23 in the form of a hook which

overhangs the socket proper. Accordingly the socket 18 is angularly directed, the mouth 20 opening outwardly on the side toward the roller C.

The tongue D divides the space between the bridge 14 and the roller C into a rein space 24 on the side of the roller C and a central loop space 25 on the side of the bridge 14. The portions 26 of the side bars 11 that form the lateral walls of the central loop space 25 bow outwardly so that the said central loop space is relatively wide and large, the size of said space being such as to admit the passage of the ends of the reins. The strap B comprises at one end a loop 27 suitable for engaging with means for support, a loop 28 at the other end suitable for engaging with the tongue D, and intermediate the said ends comprises a double strap body. The loop 28 engaged with the tongue D is essentially fixed or permanent and the loop arms are inclosed by an eye piece E. The loop 27 is provided on one side with a buckle F, which permits of engaging and disengaging the same with the means of support and of adjustment of the length.

In use, the loop 28 of the strap B is passed downwardly through the eye 25 and then brought upwardly toward the tongue D. The latter is tipped or opened upwardly, the loop 28 slipped over the same, and then the tongue may be dropped with the nose 19 engaged with the socket 18. The strap body 29, accordingly, passes through the eye 15 by an upward bend and is retained in the said eye. The rein space 24, between the roller C and the loop 28 is suitable for receiving the rein and the loop 28 coöperates in guiding the same and holding the same in engagement with the roller. In order to admit the rein to the rein space 24, the rein, which may have an enlarged end, is slipped through the central loop space 25, and then by tilting the tongue D, with the loop 28 retained thereon, the rein proper is passed directly to the said rein space 24. By the reversal of the operation described, the rein may be separated from the spread roller A and without disengaging the strap B from the tongue D. Accordingly, my spread roller permits admitting and removing the rein without disturbing the loop 28 of the strap B, other than by tilting the same while engaged with the tongue D. Furthermore, the leather loop 28

operates as the direct means of guiding the rein so as to hold the same in position for engagement with the roller C, and the connection of the strap B with the spread roller
5 by means of the loop 28 is made close to the rein itself, being made directly to one of the walls that inclose the rein. The body of the strap B being rove through the eye 15 as described insures that the strain on the strap
10 B will retain the tongue D in engagement with the socket 18, resulting in a constant and reliable connection of the strap and spread roller under normal conditions of use. Furthermore, the supporting strap B
15 may be readily disconnected from the spread roller A by slipping the loop 28 off from the tongue D.

I claim as my invention:—

A spread roller comprising a rein space at one end, an eye at the other end suitable for admitting the loop of a supporting strap, 20 and a loop space intermediate the said ends suitable for admitting a rein, a pivotally mounted tongue serving as the dividing wall between the said loop space and rein 25 space, the said tongue acting to receive and retain the said loop of the supporting strap after the said strap has been run through the said eye of the spread roller.

JOSEPH E. MELCHIOR.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."