No. 884,231. PATENTED APR. 7, 1908.

H. G. SPRAKER.

HAME STRAP ATTACHMENT.

APPLICATION FILED MAR. 20, 1907.

2 SHEETS—SHEET 1.

Fig. 1.

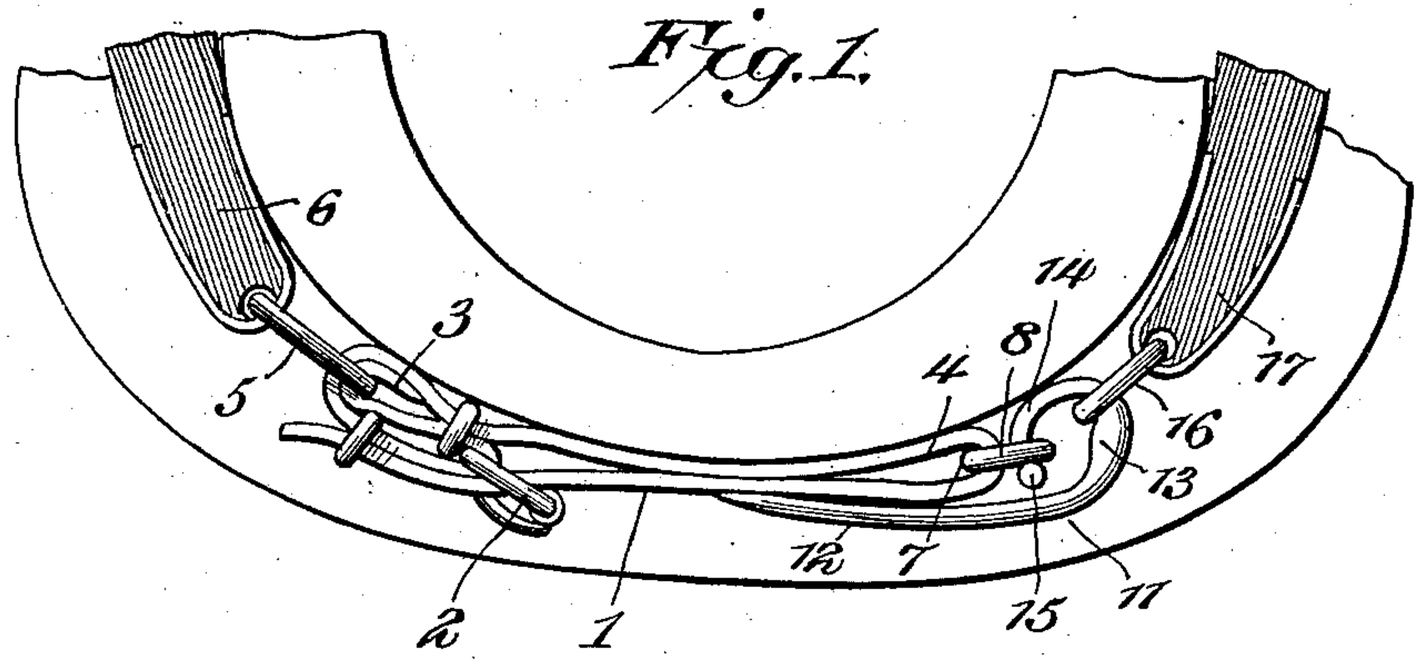



Fig. 2.

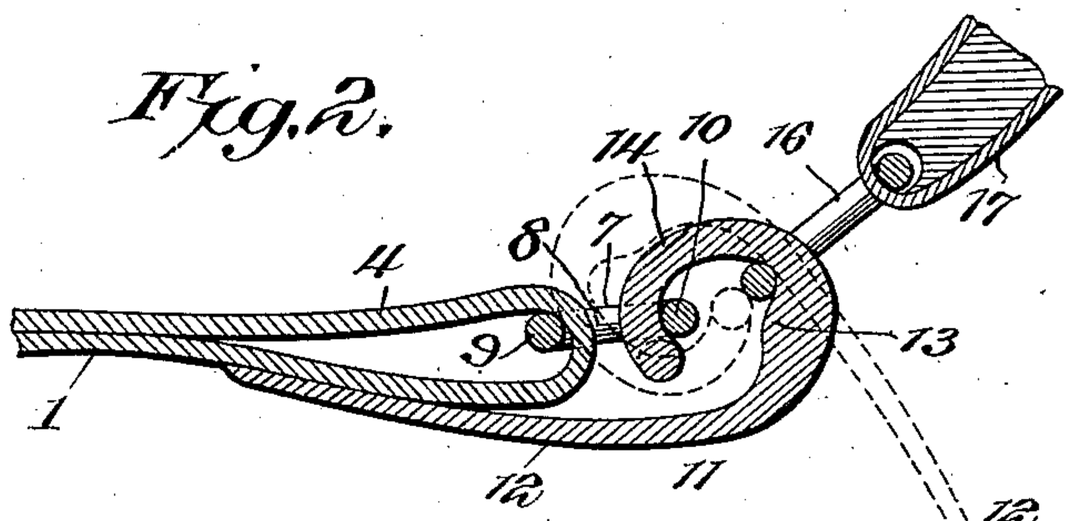



Fig. 3.

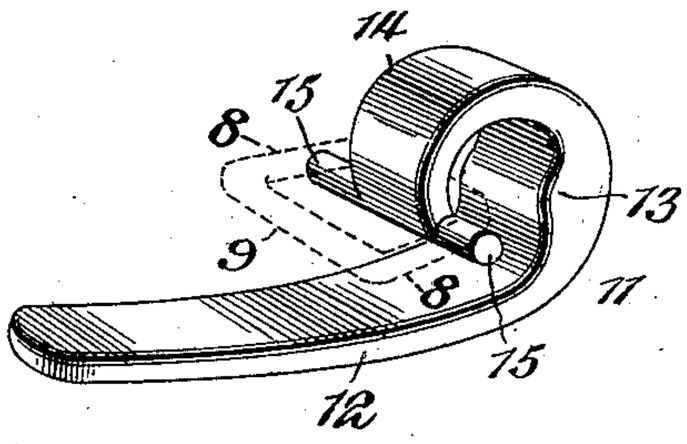
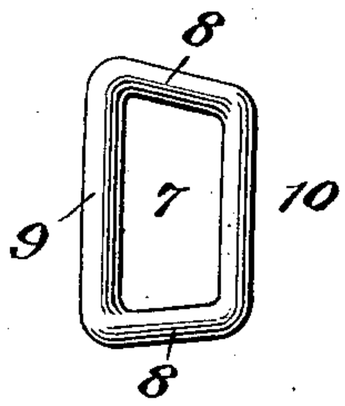



Fig. 4.

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2 SHEETS—SHEET 2.

Fig. 5.

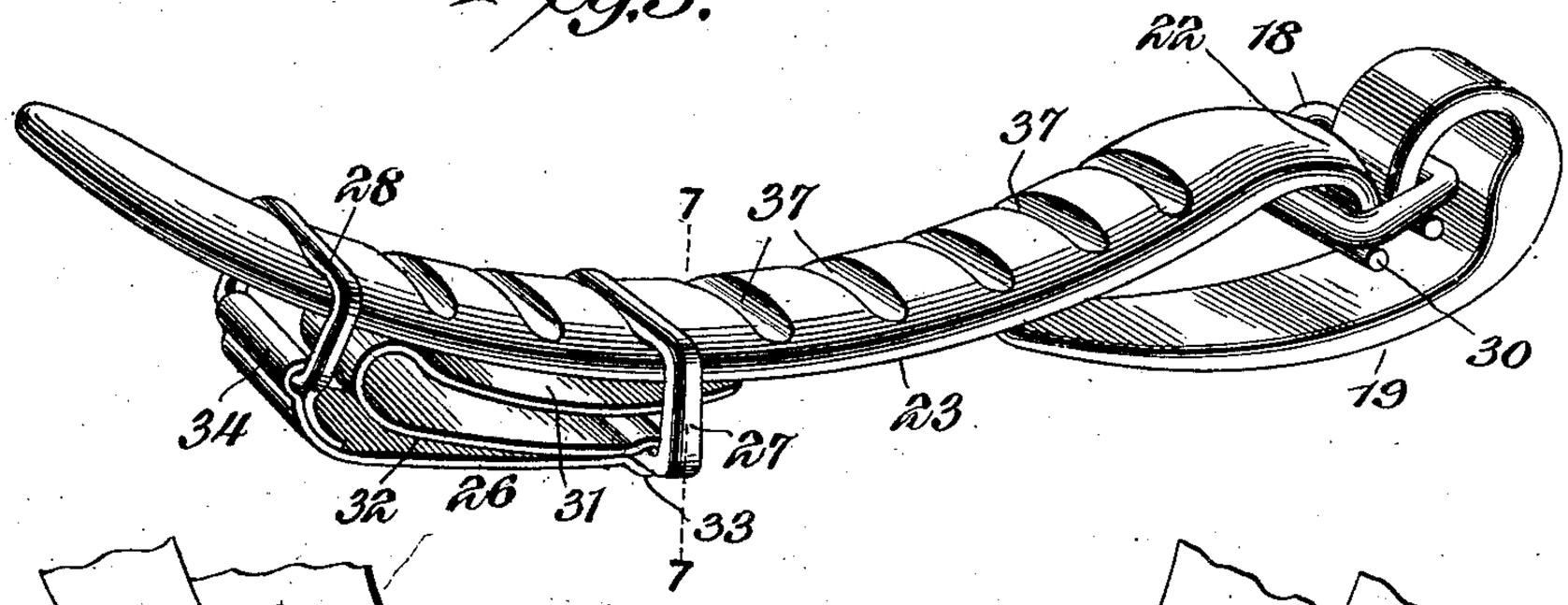



Fig. 6.

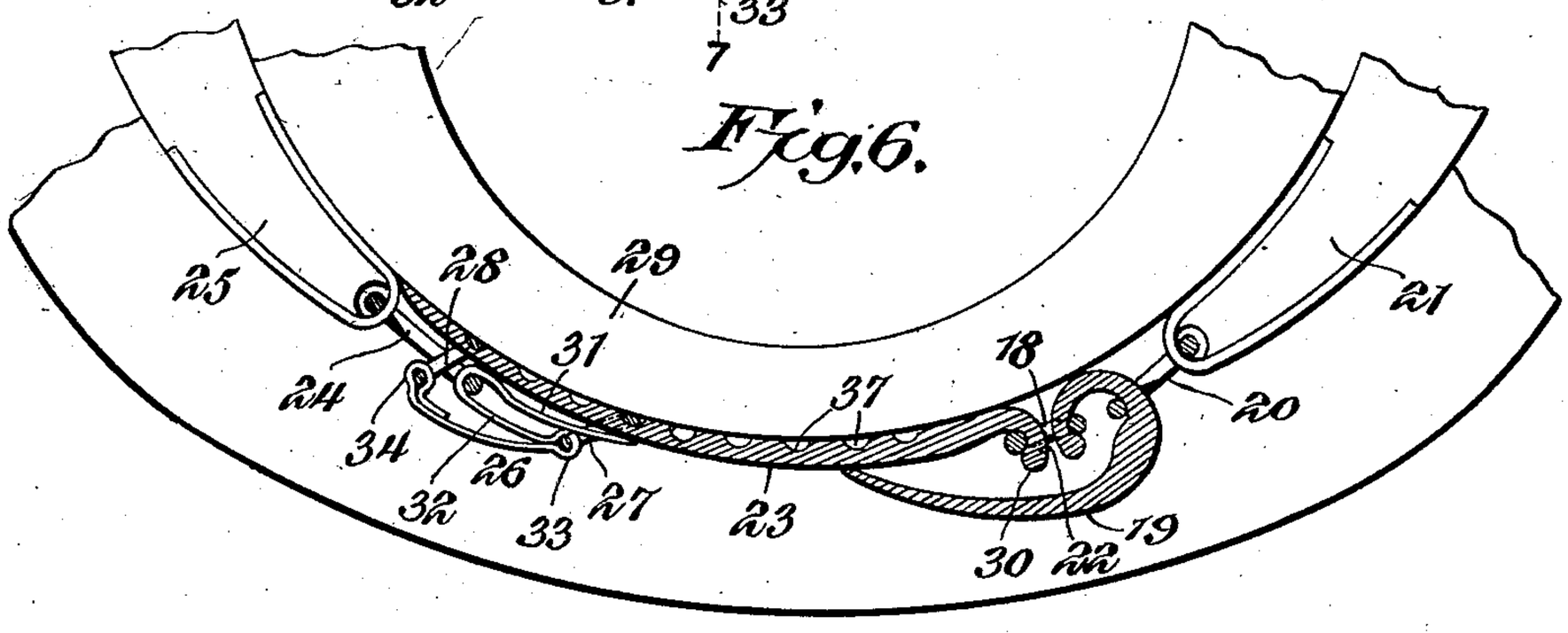



Fig. 7.

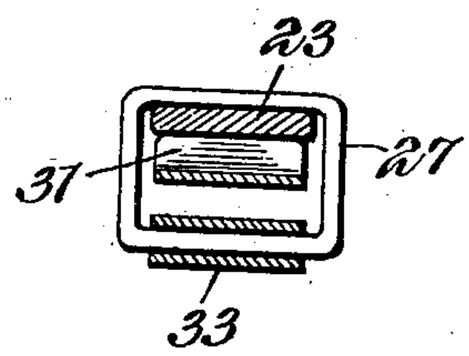
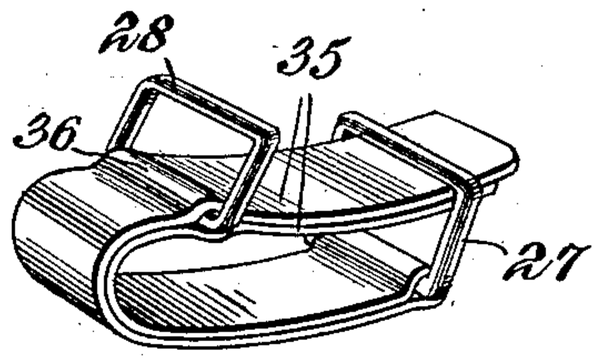



Fig. 8

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# UNITED STATES PATENT OFFICE.

HENRY G. SPRAKER, OF RICH HILL, MISSOURI.

## HAME-STRAP ATTACHMENT.

No. 884,231. Specification of Letters Patent. Patented April 7, 1908.

Application filed March 20, 1907. Serial No. 363,433.

*To all whom it may concern:*

Be it known that I, HENRY G. SPRAKER, a citizen of the United States, residing at Rich Hill, in the county of Bates and State of Missouri, have invented a new and useful Hame-Strap Attachment, of which the following is a specification.

The invention relates to improvements in hame fasteners.

The object of the present invention is to produce a hame fastener, designed according to the requirements of manufacturers of such goods, so as to be able to produce said fasteners at a minimum cost, and further to provide a hame fastener so designed as to meet the requirements of the user of the same, thereby insuring a sale for the device.

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 drawings, 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 drawings:—Figure 1 is a side elevation of a hame fastener, constructed in accordance with this invention and shown applied to an ordinary hame strap. Fig. 2 is a longitudinal sectional view of the lever and the adjacent portion of the hame strap. Fig. 3 is a detail perspective view of the lever. Fig. 4 is a detail view of the loop or link. Fig. 5 is a perspective view of a hame fastener showing the preferred form of the invention. Fig. 6 is a longitudinal sectional view, showing the same applied to a pair of hames and a portion of a collar. Fig. 7 is a sectional view on the line 7—7 of Fig. 5. Fig. 8 is a detail perspective view, showing another form of the spring hook.

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

1 designates a hame strap, constructed in the usual manner and provided at one end with a buckle 2. The hame strap, which is doubled and connected to form the end loops 3 and 4, is connected by a link 5 with the lower end of a hame 6. The link 5, which is provided with straight sides and ends, is received within the loop 3, and the other loop receives a slightly tapered link 7, having converging ends 8, and provided with sides 9 and 10 of unequal length, the long side 9 being arranged within the loop 4. The link 7, which extends beyond the hame strap, is engaged by a hook-shaped lever 11, consisting of a curved body portion 12, having a thickened arm 13 at one end, from which extends an inwardly curved bill 14.

The thickened portion or enlargement is arranged at a point intermediate of the ends of the lever, and the bill or engaging portion 14 is substantially semi-circular, being continuously curved from the thickened portion or enlargement to its end. The said bill or engaging portion passes through the narrow outer portion of the link, and is provided with terminal lugs 15, projecting laterally from opposite sides of the bill or engaging portion and engaging the link at the lower edges thereof to form stops for limiting the movement of the bill in one direction.

The thickened arm 13 limits the relative movement of the link and the lever in the opposite direction and forms an outer stop, the link being confined between the thickened arm or portion 13 and the laterally extending lugs 15. The thickened portion or arm 13, besides operating as a stop, also increases the strength of the lever at the point where the greatest strength is required. In assembling the parts, the loop or link 7 is placed on the lever at the free end thereof, and is moved along the same until it is engaged by the laterally projecting lugs 15. The hame strap is then passed through the loop or link 7 and operates as a key for retaining the bill and the link in engagement with each other. The lever also engages a link 16 of a hame 17, and the bill and the body portion of the lever form a continuous curve to enable the lever to be readily oscillated to fasten and unfasten the hames. When the hames are fastened, as illustrated in Figs. 1 and 2 of the drawings, the link 16 is arranged at the upper end of the thickened arm or portion of the lever, and the strain on the parts maintain the end of the body portion positively in engagement with the hame strap at the bottom thereof, and effectually prevents the parts from becoming accidentally unfastened. The lever is adapted to lie close to the hame strap, and there is no liability of the lever becoming accidentally unlocked.

In Figs. 5 to 7 of the drawings is illustrated the preferred form of the invention, which

embodies a tapering link 18 and a hook-shaped lever 19, both of which parts are constructed the same as the link 7 and the lever 11 heretofore described. The hook-shaped lever 19 engages a link 20 of a hame 21, and the link 18 receives one end 22 of a curved bar or member 23, which is adjustably connected with the link 24 of the other hame 25 by means of a spring hook 26 and a pair of links or loops 27 and 28. The bar or member 23 is curved to conform to the general configuration of the bottom of a horse collar 29, and the end 22 is bent downwardly and is provided with laterally extending lugs 30 for engaging the loop or link 18 at the enlarged end thereof.

The spring hook engages the link 24 of the hame 25, and it consists of an upper portion or bill 31 and a lower portion or shank 32, which is composed of two plies or thicknesses, the material being folded or doubled to form an inner eye 33 for the reception of the inner link or loop 27. The spring hook is constructed of a single piece of resilient material, and the bottom portion or ply of the shank may terminate at the outer end of the spring hook in an eye 34 to receive the outer link or loop 28, or the metal may, as illustrated in Fig. 8 of the drawings, be extended along the bill or upper portion to form two plies 35. When the bill of the hook is composed of two plies, the upper one is grooved or bent at 36 near the outer end of the spring hook to receive the outer link.

The inner and outer links 27 and 28 are arranged on the curved bar or member 23, and the inner link is adapted to engage any one of a plurality of transverse notches 37, whereby when the hame fastener is subjected to strain, the inner link will securely engage the curved bar or member and form a positive lock. When the device is not subjected to strain, the resiliency of the spring hook will maintain the links in engagement with the curved bar or member, but when the hames are fastened, the strain on the device swings the outer or lower side of the inner link upwardly against the bill of the spring hook, which is tightly compressed, and there is no liability of the parts accidentally slipping.

The link 24 is connected with the spring hook and is slipped on the bill thereof before the spring hook is applied to the curved bar or member, and the said link 24 is arranged in the loop formed by the outer portion of the spring hook, which with the links form an adjustable device for connecting one of the hames with the curved bar or member. This adjustment enables the hame fastener to readily adapt itself to various sizes of horse collars, and the unused or projecting portion of the curved bar or member lies in the groove of the collar and is concealed by the adjacent hame. The outer link is not essential to the operation of the adjustable connection between the hame 25 and the curved bar or member, but is preferably employed as it supports the outer portion of the spring hook.

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

1. In a device of the class described, the combination with a pair of hames, of a link having straight sides and ends, connecting means extending from the link to one of the hames, a curved lever provided at an intermediate point with a thickened portion or enlargement and having a substantially semi-circular engaging portion or bill continuously curved from the said thickened portion or enlargement to its end and extending through the link and provided with terminal laterally projecting lugs engaging the link at the lower edges thereof, and a link carried by the other hame and engaged by the said lever, the free end of the lever fitting closely against the said connecting means when the lever is in its locked position.

2. In a device of the class described, the combination with a pair of hames, of a link, a connecting bar between one of the hames and the link and having one of its ends curved downwardly and passed through the said link and provided with terminal laterally-projecting engaging lugs engaging the link at the lower edges thereof, a lever having a curved engaging portion extending through the link and provided with terminal laterally projecting lugs engaging the link at the lower edges of the same, and a link carried by the other hame and engaged by the said lever.

3. A device of the class described comprising a bar provided at intervals with notches, means for detachably connecting one end of the bar with one of a pair of hames, a link slidable on the bar and engaging any one of the notches thereof, and a resilient connection between the other hame and the link to hold the latter in engagement with the bar, whereby the bar is prevented from sliding through the link when the hames are unfastened.

4. A device of the class described comprising a bar provided at intervals with notches, means for detachably connecting one end of the bar with one of a pair of hames, a link slidable on the bar and engaging any one of the notches thereof, and a resilient hook connected with the link and with the other hame and bearing against the bar to maintain the said link in engagement with the same, whereby the bar is prevented from sliding through the link when the hames are unfastened.

5. A device of the class described comprising a bar provided at intervals with notches, a link slidable on the bar and engaging any

one of the notches thereof, means for connecting one end of the bar with one of a pair of hames, and a resilient hook connected with the other hame and composed of a lower shank connected with the link at the bottom thereof, and an upper bill extending through the link and bearing against the bar to maintain the link in engagement with a notch of the bar.

6. A device of the class described comprising a bar, means for connecting one end of the same with one of a pair of hames, a resilient hook forming a loop for engaging the other hame and composed of an upper bill and a lower shank, and spaced links connected with the hook and slidable on the bar and adjustably connecting the hook and the said bar.

7. A device of the class described comprising a bar, means for connecting one end of the same with one of a pair of hames, a resilient hook designed to be connected with the other hame and consisting of an upper bill, and a lower shank having a plurality of plies and provided with spaced eyes, and inner and outer links arranged in the eyes and slidable on the bar.

8. A device of the class described comprising a link, a hook-shaped lever detachably engaging the link, a member also having one end detachably connected with the link, said member being provided at intervals with notches, a resilient hook, and terminal links connected with the hook and slidable on the member, the link at the inner end of the hook being adapted to engage the said notches.

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

HENRY G. SPRAKER.

Witnesses:
H. D. OLSEN,
J. LARSON.