P. WEBER & H. DAMME.

Axle-Skeins.

No. 197,705. Patented Nov. 27, 1877.

Fig. I.

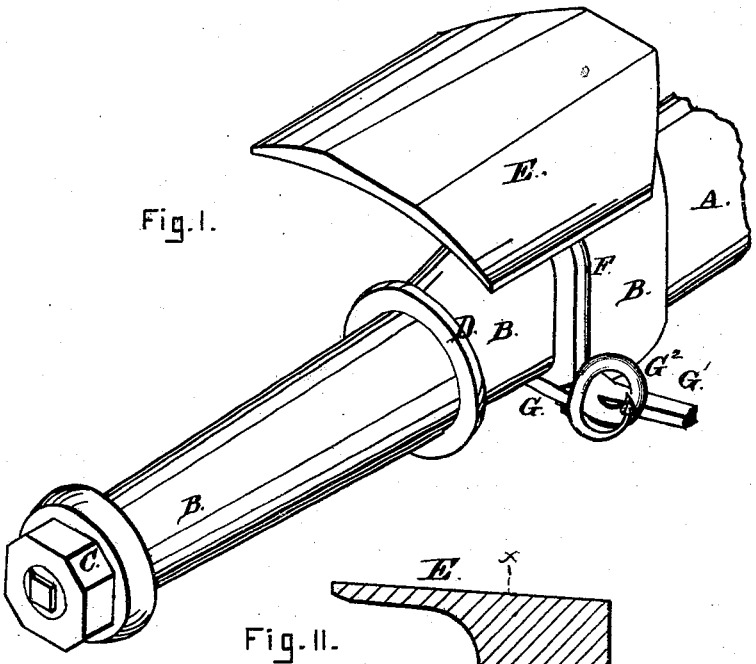


Fig. II.

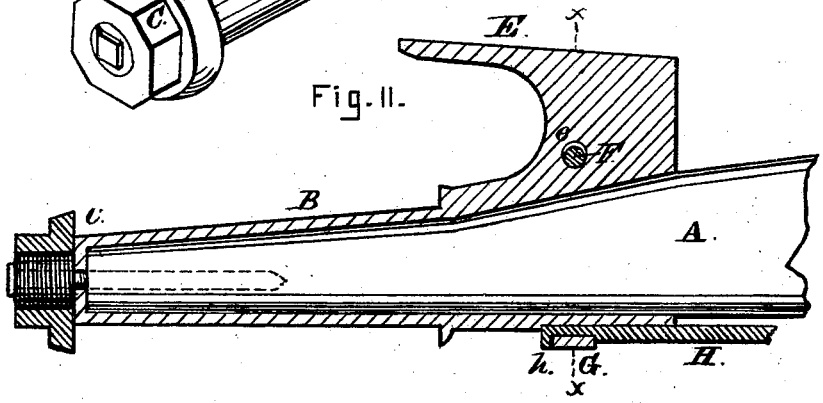
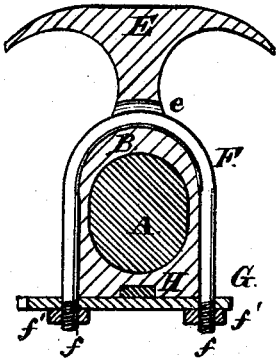


Fig. III.



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PHILIP WEBER AND HENREY DAMME, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN AXLE-SKEINS.

Specification forming part of Letters Patent No. **197,705**, dated November 27, 1877; application filed June 21, 1877.

To all whom it may concern:

Be it known that we, PHILIP WEBER and HENREY DAMME, both of the city of St. Louis and State of Missouri, have invented certain new and useful Improvements in Thimble-Skeins for Axles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

Our improvement consists, first, in combining with the axle-skein a sand-plate extending over the wheel.

Our improvement consists, secondly, in a clip passing through the casting between the axle-socket and the sand-plate, and provided with a brace-rod and stay-chain hook.

In the drawings, Figure 1 is a perspective view. Fig. 2 is a longitudinal axial section. Fig. 3 is a transverse section at *x x*.

A is a portion of the axle, and B is the metal thimble-skein, having at the end a nut, C, as usual, to retain the wheel. D is the butting-shoulder. E is an arched hood, which covers the inner end of the hub sufficiently to prevent any sand or other material dropping between the hub and the skein on which it turns. *e* is a hole made transversely through the hood-block, for the passage of the clip-iron F. The ends of this iron have screw-threads *f*, on which are nuts *f'*, serving to hold upon the clip-iron F the plate G, which forms the other member of the clip. This plate, in the case of the rear axle, extends forward at G^1, and forms the metal brace extending from the axle to the rear hounds. In case of the fore axle the plate G is forked, one part, G^1, extending to the tongue-hounds, and the other part, G^2, being formed into the stay-chain hook. H is the tie-bar, extending either all along the bottom of the axle from clip to clip, or extending from each clip (F G) to the vertical hound-bolt. The ends are turned down into lips *h*, which engage the outer side of the plate G, so as to hold the skein B tightly upon the axle, and also to strengthen the axle at the point of junction with the skein.

It is found, in practice, that the ordinary thimble-skeins are subject to fail, from becoming split at the inner end; and it is also found that the axle frequently breaks at the point of junction with the skein.

Our improvement overcomes both these imperfections, because the wrought clip encircles the end of the skein, and provides a point of attachment for the brace-rods G^1 and H at a point outside the place of junction of the axle and thimble-skein. The improvement also dispenses with the stay-chain bolt which ordinarily passes through the axle and serves to weaken it.

The hood E extends between the hub beneath and the sand-board or bolster above, but is not in direct contact with either; thus it does not interfere with proper flexibility of the axle.

We claim as our invention—

1. The axle-skein having a sand-plate extending over the wheel, as and for the purpose set forth.

2. The clip passing through the casting between the axle-socket and the sand-plate, and provided with brace-rod G^1 and stay-chain hook G^2, as set forth.

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HENREY DAMME.

Witnesses:
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