C. E. GILLESPIE, H. J. & F. J. SPRINGER

Thill-Coupling.

No. 207,115. Patented Aug. 20, 1878.

FIG. 1.

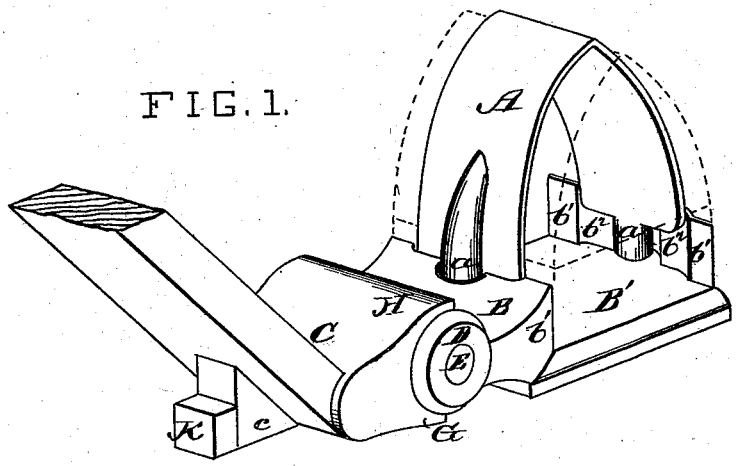


FIG. 2.

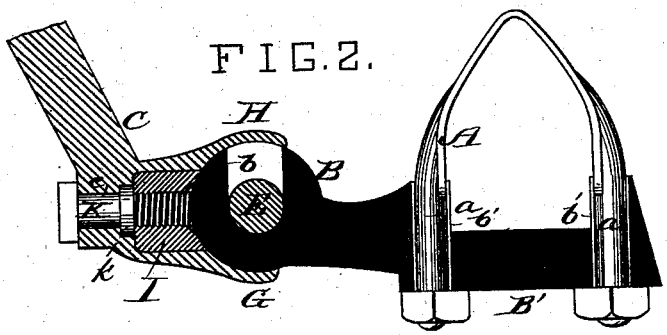


FIG. 3.

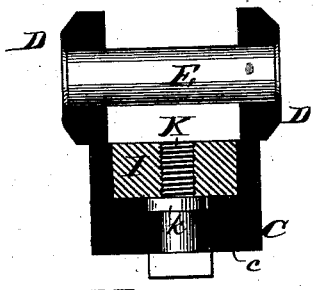
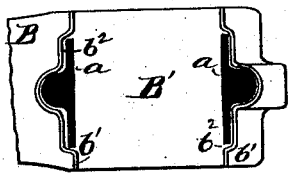


FIG. 4.



ATTEST.

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UNITED STATES PATENT OFFICE.

CYRUS E. GILLESPIE, HENRY J. SPRINGER, AND FREDERICK J. SPRINGER, OF EDWARDSVILLE, ILLINOIS.

IMPROVEMENT IN THILL-COUPLINGS.

Specification forming part of Letters Patent No. **207,115**, dated August 20, 1878; application filed June 7, 1878.

To all whom it may concern:

Be it known that we, CYRUS E. GILLESPIE, HENRY J. SPRINGER, and FREDERICK J. SPRINGER, residents of Edwardsville, Illinois, have made new and useful Improvement in Thill-Couplings, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a perspective view of a thill-coupling having our improvement; Fig. 2, a longitudinal vertical section; Fig. 3, a horizontal section taken through the shaft-iron, and Fig. 4 a horizontal section taken through the clip just above the axle-bed.

The same letters of reference denote the same parts.

The present invention is an improvement upon the construction patented by Cyrus E. Gillespie and Henry J. Springer, June 27, 1876, numbered 179,296. It has relation to the means for preventing the coupling from rattling, and to the provision whereby the axle-iron is made to directly and exclusively sustain the strain in drawing the carriage.

Referring to the drawing, A represents the axle-clip, B the hook, and C the shaft-socket, having the cheeks D D, pin E, guard G, and shield H, all constructed and operating as in the construction referred to, saving as modified by the present improvement, which, more particularly described, is as follows:

The shaft-socket C, in place of being solid where it comes against the outer end of the hook B, is chambered out to hold a follower, I. The latter, at its outer end, is shaped to conform to the hook B, and is made to bear against it by means of a screw, K, which, passing through a bearing, *c*, in the shaft-socket, engages with the follower. A collar or shoulder, *k*, upon the screw prevents the latter when turned from having a longitudinal movement. Now, as the pin E and other parts of the coupling become worn in use, the wear can be taken up and rattling prevented by turning the screw suitably to move the follower out against the hook until the outer part, *b*, of the hook is held snugly between the pin and the follower. The follower is of suitable material, such as brass. A spring can be used in place of the screw to hold the follower against the hook.

The improvement further relates to the construction of that part of the coupling which is immediately connected with the carriage-axle. Instead of making the hook an extension of the strap or clip that passes over the axle and rigidly connecting the hook and clip, the clip A is made a separate piece from the hook B, the ends *a a* of the clip passing down through what we term the "axle-bed," B′, and which is made in one piece with the hook B. The axle-bed serves as a tie to fasten the clip to the axle, but also and more particularly to form the connection of the hook and coupling directly with the axle-iron, and thus prevent the strain of the coupling from coming upon the wooden portion of the axle above the axle-iron. For this last-named purpose the axle-bed B′ is provided with jaws b^1 b^1, suitably spaced apart to receive and fit the axle-iron, and the ends *a a* of the clip are passed through recesses b^2 b^2 in the jaws, so as not to bear upon the axle-iron. The clip A serves only to secure the axle-bed to the axle-iron, the latter sustaining exclusively the strains imparted by the coupling. This mode of connecting the coupling with the axle is valuable in strengthening the connection and rendering it more durable.

We claim—

The shaft-socket C, having the follower I bearing against the outer end of the part *b* of the hook, the screw K, and pin E, in combination with the hook B, substantially as described.

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Witnesses:
JOHN H. WHITE,
JACOB HOENSER.