

(No Model.)

T. D. LINES.
DROP PERCH COUPLING.

No. 300,275.

Patented June 10, 1884.

FIG-1-

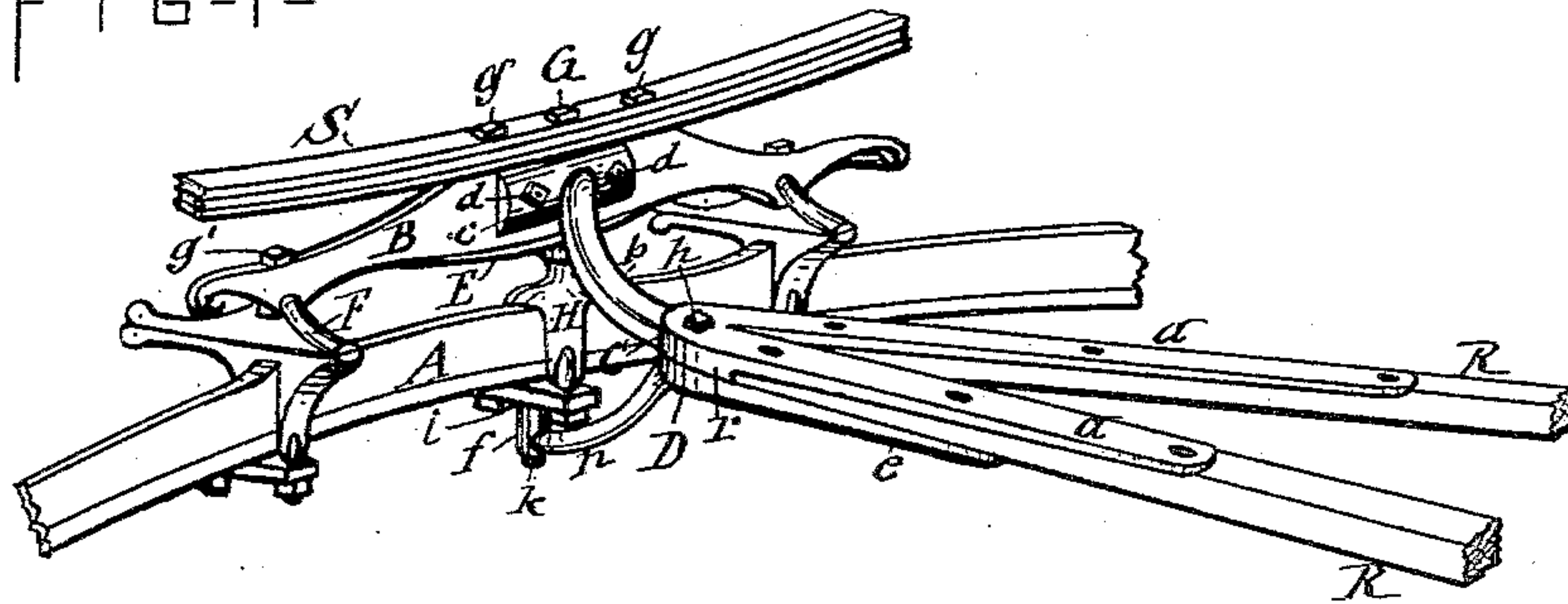


FIG-2-

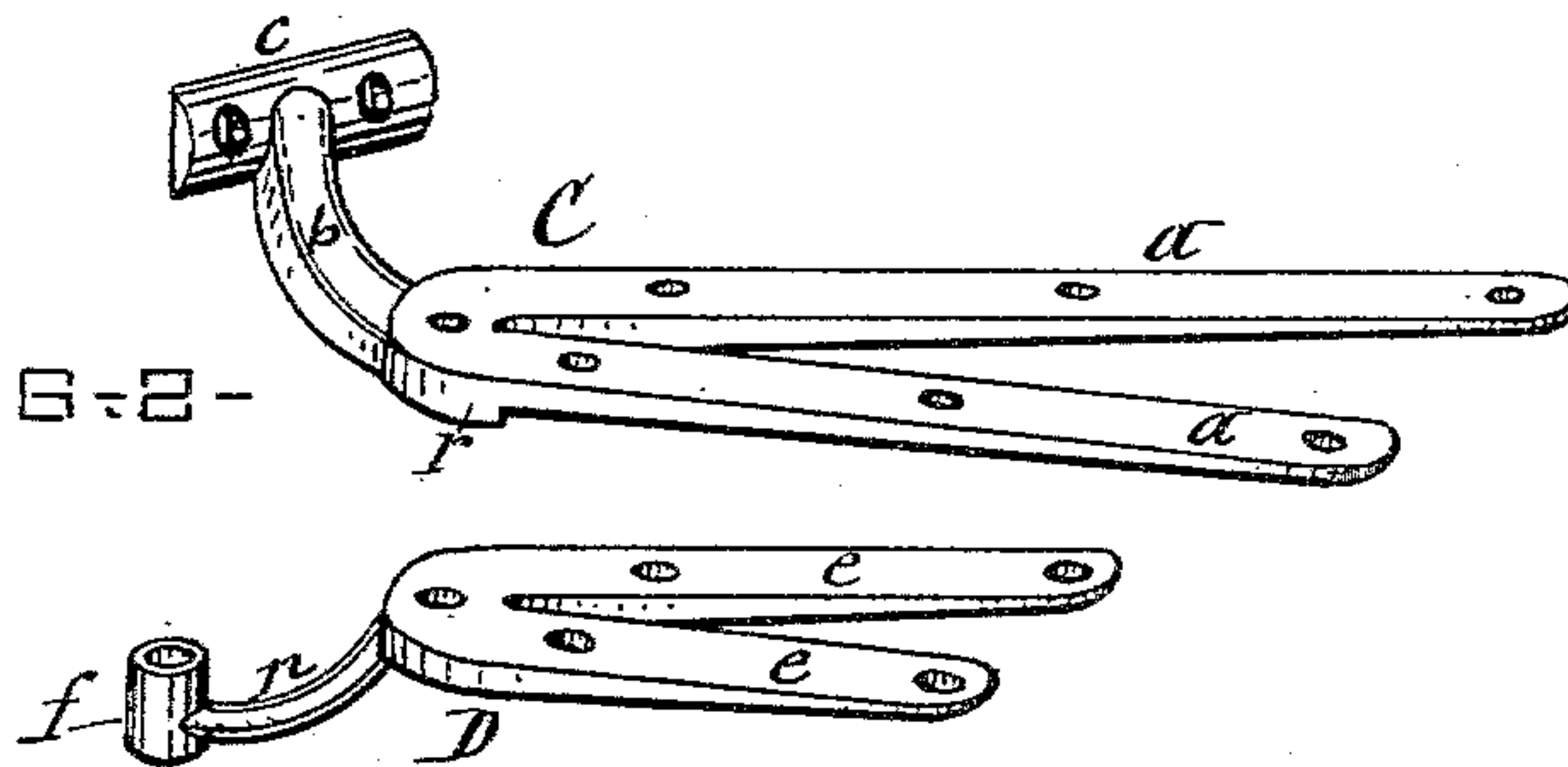
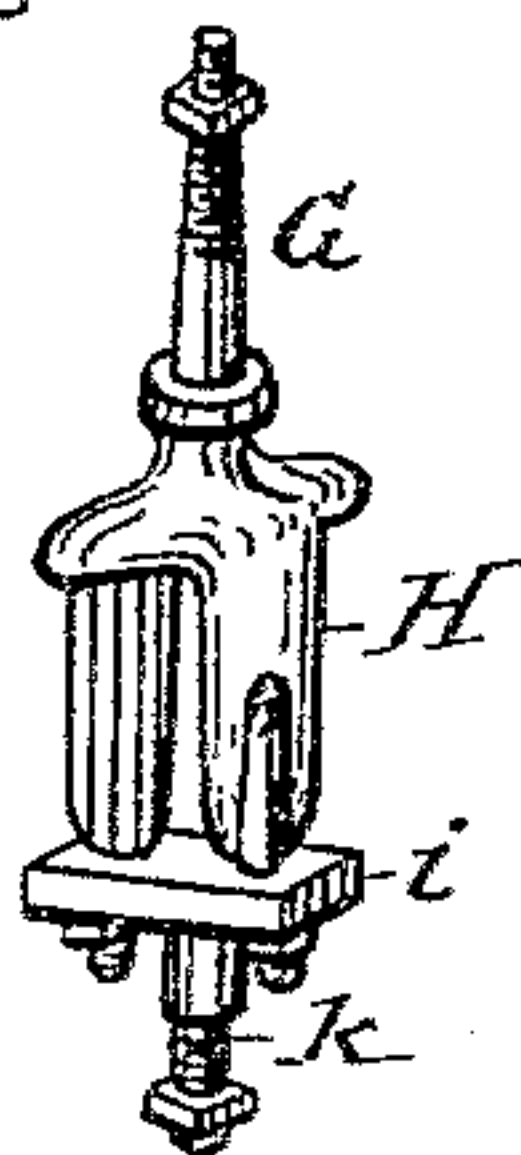


FIG-3-



ATTEST—

Wm. B. Raymond
J. H. Gibbs

INVENTOR—

Thomas D. Lines
per Blunt, Laessle & Hey
his Atty.

UNITED STATES PATENT OFFICE.

THOMAS D. LINES, OF SYRACUSE, NEW YORK.

DROP-PERCH COUPLING.

SPECIFICATION forming part of Letters Patent No. 300,275, dated June 10, 1884.

Application filed January 21, 1884. (No model.)

To all whom it may concern:

Be it known that I, THOMAS D. LINES, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Drop-Perch Couplings, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to the coupling with the forward running-gear of a double reach converging toward the forward end.

The invention consists in a novel construction of a single set of braces connecting the aforesaid double reach with the head-block and axle, said braces being of a form which allows them to be manufactured by means of a drop-press, which feature is conceded to be one of the important desiderata in the manufacture of carriages, and aside from this forms by far a stronger, safer, and more durable coupling between a double reach and the axle and head-block, all as hereinafter more fully described, and specifically set forth in the claim.

The invention is fully illustrated in the annexed drawings, wherein Figure 1 is a perspective view of the forward running-gear of a vehicle provided with my improvement. Fig. 2 is a detached perspective view of the set of braces which connect the double reach with the aforesaid running-gear, and Fig. 3 is a detached perspective view of the bottom plate of the head-block and of the king-bolt clip.

Similar letters of reference indicate corresponding parts.

A represents the forward axle, and B the head-block mounted thereon in the usual manner, and having a plate, E, secured to the bottom thereof by bolts *g*, passing vertically through the spring S, head-block B and bottom plate, E, and by bolts *g'*, passing through the end of the head-block, bottom plate, and subjacent bearing-plate F, which latter serves the function of the upper circle of the so-called "fifth-wheel."

G is the king-bolt, which projects from a clip, H, through the plate E and head-block, said clip being fastened to the center of the axle by a clip-bar, *i*, applied to the under side of the axle and receiving the shanks of the clip, which are provided with nuts under-

neath the clip-bar in the usual manner. A stud, K, projecting from the under side of the clip-bar, serves for the connection of the reach-coupling, hereinafter presently described.

R R denote two reaches, which converge toward their forward end, and are connected with the forward running-gear by a single set of braces, C D. The single top brace, C, is constructed with divergent shanks *a a*, which are in one and the same horizontal plane and lie on top of the forward end of the two reaches, as shown in Fig. 1 of the drawings. The reaches terminate at or near the junction of the two shanks *a a*, at which point the brace C is reinforced by an enlargement, *r*, of its depth, forming an abutment for the ends of the two reaches and a bearing for the bottom brace, D, hereinafter described. From the junction of the aforesaid shanks rises a curved neck, *b*, which is formed integral with said shanks, and terminates with a T-shaped head, *c*, which is fitted to the back of the head-block, and is provided in its ends with bolt-holes *d d* for the reception of bolts, which pass horizontally through the head-block and fasten the aforesaid T-shaped head thereon, as illustrated in Fig. 1 of the drawings. The single bottom brace, D, is constructed with divergent shanks *e e*, which are in one and the same horizontal plane and lie under the shanks *a a* of the brace C, to receive between them the convergent ends of the two reaches, which abut against the before-described enlargement or re-enforce *r* of the upper brace, and thus greatly relieve the bolts or rivets by which the reaches are connected with the aforesaid braces. A bolt, *h*, passes through the described set of braces at the junction of their shanks and holds the lower brace contiguous to the under side of the re-enforced portion *r* of the upper brace and firmly ties them together. From the junction of the shanks *e e* is extended a downwardly-curved neck, *n*, which is integral with said shanks, and terminates with an eye, *f*, through which passes the stud K of the king-bolt clip hereinbefore described. A nut on the end of the said stud serves to retain the eye *f* thereon and completes the coupling of the brace with the axle A. The reaches are fastened between the shanks *a* and *e* by bolts passing vertically through said parts in the usual manner.

I do not claim, broadly, the attachment of a double reach to the forward running-gear by means of a single set of braces, as I am aware that the same is not new; but

5 What I do claim as my invention, and desire to secure by Letters Patent, is—

In combination with the convergent reaches R R, axle A, and head-block B, the bottom brace, D, composed of the divergent shanks
10 *e e* and the neck *n*, formed integral therewith and terminating with the eye *f*, and the top brace, C, composed of the divergent shanks *a a*, the re-enforce *r* at the junction of said shanks, lying contiguous to the lower
15 brace, and forming an abutment for the ends

of the two reaches, and the neck *b*, formed integral with the shanks *a a*, and terminating with the T-head *c*, all constructed and combined substantially in the manner specified and shown. 20

In testimony whereof I have hereunto signed my name and affixed my seal, in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 10th day of January, 1884.

THOMAS D. LINES. [L. S.]

Witnesses:

FREDERICK H. GIBBS,
WM. C. RAYMOND.