P. BLAKE.

Thill-Coupling.

No. 38,650. Patented May 26, 1863.

Fig 1

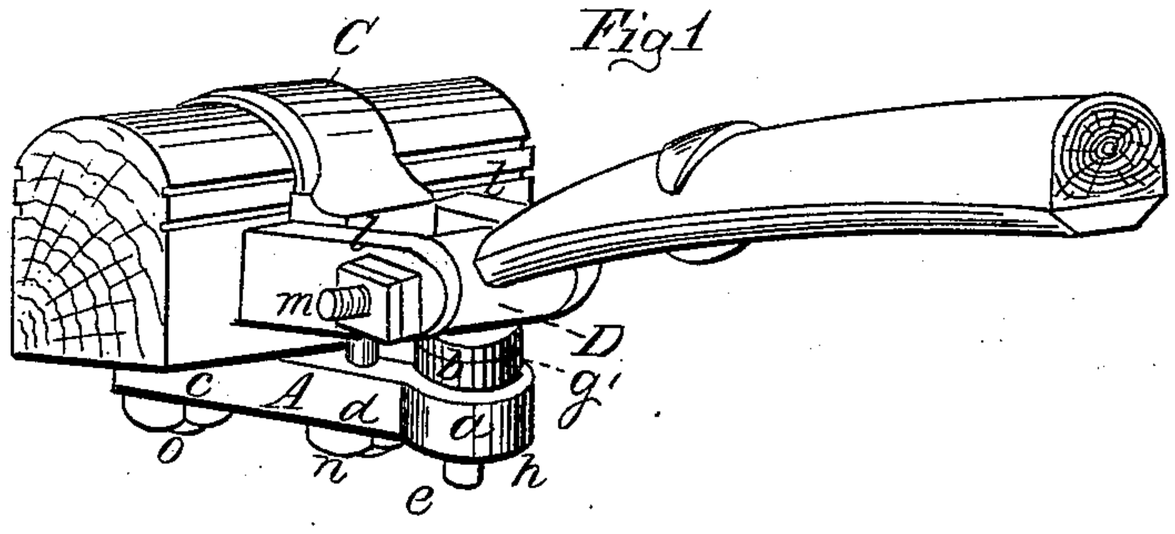

Fig.2

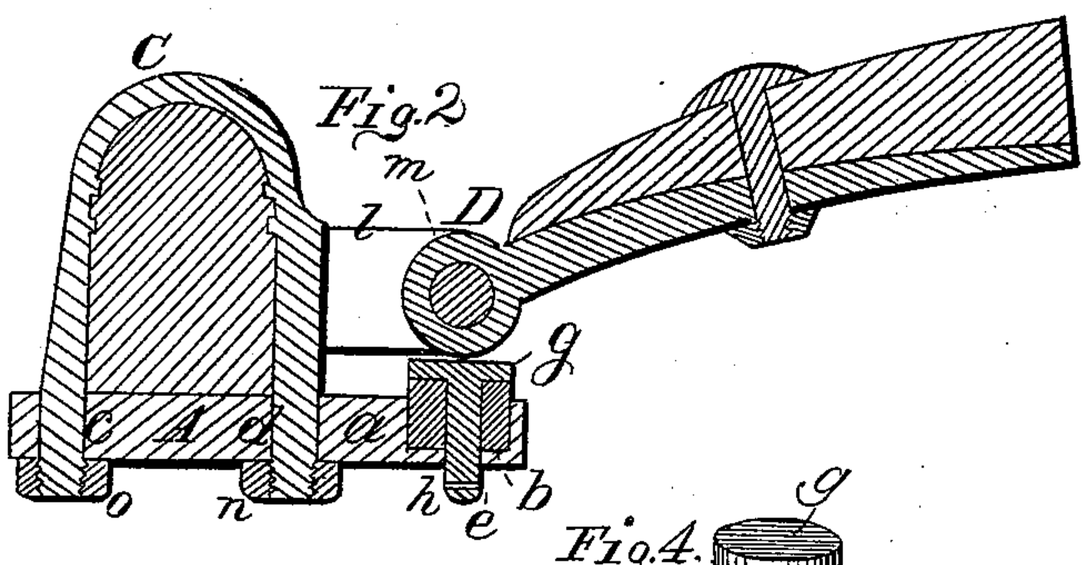

Fig.3.

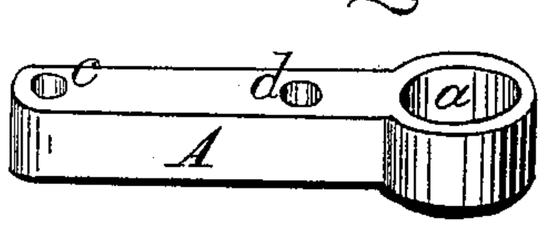

Fig.4.

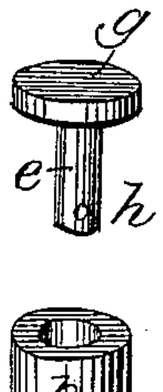

Fig.5.

Witnesses

Henry E Bowns

R J Fitzgerald

Inventor.

Philos Blake

UNITED STATES PATENT OFFICE.

PHILOS BLAKE, OF NEW HAVEN, CONNECTICUT.

IMPROVEMENT IN DRAFT-CLIP TIES FOR CARRIAGES.

Specification forming part of Letters Patent No. **38,650,** dated May 26, 1863.

To all whom it may concern:

Be it known that I, PHILOS BLAKE, of the city and county of New Haven, in the State of Connecticut, have invented a new and useful Improvement in Draft-Clip Ties for Carriages; and I do hereby declare that the following is a full, clear, and exact description of the construction, character, and operation of the same, reference being had to the accompanying drawings, which make part of this specification, in which—

Figure 1 is a perspective view of the draft-clip tie, attached in its proper position for use, showing how it causes the cap to press against the knuckle-joint to prevent rattling. Fig. 2 is a section of the same, cut vertically through the draft-clip, joint, tie, &c., showing the relative positions of the several parts. Fig. 3 is a perspective view of the tie ready to receive the elastic presser, &c., showing the cup or space in which the elastic presser is to be placed. Fig. 4 is a perspective view of the cap, which rests between the elastic presser and the joint. Fig. 5 is a perspective view of a piece of india-rubber tubing, ready to be dropped into the cup or space in the tie.

My improvement consists in elongating the front part of the tie, so that it may extend forward under the thill or knuckle-joint, and in making a suitable cup or space (in the upper side of the front end) to receive a piece of india-rubber tubing, (or any other suitable elastic presser,) and in fitting a suitable cap, (with a guide-rod or bolt to pass through the presser and tie,) to rest on the elastic presser, so as to be pressed by it against the thill part of the knuckle-joint to prevent rattling. I make this clip-tie of wrought-iron or any other suitable material, substantially of the form or shape represented in Fig. 3, and indicated in section in Fig. 2 at A, sinking or making a suitable cup or space, as represented in Figs. 3 and 2, to receive a piece of india-rubber tubing, (or other suitably elastic substance,) as represented at *b*, Figs. 1 and 2; and I also make a suitable hole in the bottom of this space to receive the rod *e* of the cap, as shown in section in Fig. 2, and two holes to receive the ends of the draft-clip, as shown at *c* and *d*, Figs. 3 and 2. I make the elastic presser of india-rubber tubing, as shown in Fig. 5 and indicated in Figs. 2 and 1, or of any other suitably elastic material. I make the cap of the presser of wrought-iron or any other suitable material, substantially in the form shown at *g*, Fig. 4, with a guide-rod or bolt, *e*, to pass through the elastic presser and the tie, as shown in Fig. 2 and indicated in Fig. 1, (with a hole in the lower end at *h* to receive a key to hold itself and the presser in place when the thills are off.) This cap holds the elasticity of the presser *b* equally balanced, as indicated in Fig. 2, and also prevents any wear on the elastic presser. I use the draft-clip C with its lugs *l l* and the draft-iron (or thill part of the knuckle-joint) D of the usual form, as shown in Figs. 1 and 2, or otherwise, and I attach them with a screw-bolt, *m*, in the usual way, or otherwise. I place the elastic presser, as Fig. 5, in the cup or space at *a* in the tie, Fig. 3, and insert the guide-rod or bolt *e* of Fig. 4 through the hole, as indicated in Fig. 2, when the tie A will be ready to be attached to the draft-clip for use. I then pass the two holes *c* and *d* onto the two lower ends of the clip C and turn on the nuts *n* and *o*, as indicated in section in Fig. 2, when the cap *g* (by the elasticity of the presser) will be pressed against the lower surface of the eye part D of the knuckle joint, and the whole will be as represented in Fig. 1, and will be ready for use. I take care to have the presser *b* of the proper length or thickness to give the required amount of pressure to prevent rattling, and yet not make the joint too stiff; and if the pressure should become too slight by the setting of the elastic substance, a washer of leather or any other suitable material may be placed under the elastic presser *b* or between it and the cap *g*. If I wish to take out the thills I can turn back the nut *n* on the front part of the clip so as to lessen the force on the presser *b*, when then thills may be taken out or put in as freely as if nothing was used to prevent the rattling; but without loosening the nut *n* any man can readily press down the eye part of the joint so as to relieve the bolt *m*.

The advantages of my improvement consist in the simplicity of its construction and trifling cost; and in that the equilibrity of the elastic presser is insured by the cap, which also prevents it from wearing, and in that the thills may be removed with ease.

I am aware that india-rubber has been used in various ways to prevent the rattling of the joints, (where the thills are attached to the car-

riage,) and that pressure has long been used. I therefore do not claim either india-rubber or pressure as such; but

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

1. The combination of my elongated clip-tie with an elastic presser, when constructed and fitted to produce the result substantially as herein described.

2. The combination of the cap with the elastic presser when so constructed and used that the cap will insure the entire equilibrity of the presser, as well as prevent it from wearing, substantially as herein described.

PHILOS BLAKE.

Witnesses:

HENRY E. BOWERS,

R. FITZGERALD.