

UNITED STATES PATENT OFFICE.

GEORGE J. BREITENSTEIN, OF KEOKUK, IOWA.

COCKEYE.

SPECIFICATION forming part of Letters Patent No. 793,043, dated June 27, 1905.

Application filed January 28, 1904. Serial No. 190,978.

To all whom it may concern:

Be it known that I, GEORGE J. BREITENSTEIN, a citizen of the United States, residing at Keokuk, in the county of Lee and State of Iowa, have invented new and useful Improvements in Cockeyes, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to improvements in harness-tugs, and particularly to the cockeyes for fastening the same to the whiffletree-hooks.

It has been found that with an ordinary round or oval-shaped cockeye when the trace becomes slack the cockeye will disengage from its hook, thereby causing serious inconvenience and perhaps serious damage, owing to the liability of the trace becoming entangled with the horse's legs.

It is one of the objects of this invention to provide means for holding the cockeye into close engagement with the hook, and thereby prevent it when the trace becomes slack from slipping off, and to also provide means to prevent rattling of the cockeye against the part to which it is attached.

In the drawings, showing the preferred form of my invention, Figure 1 is an elevation of my improved cockeye. Fig. 2 is an elevation showing the same in engagement with a curved whiffletree-hook. Fig. 3 is an elevation showing the same in engagement with a straight whiffletree-hook, and Fig. 4 is a section on the line 4 4 of Fig. 3.

In the construction which I have worked out as being the preferred form for accomplishing the various objects set forth I provide a cockeye 1, having the usual cross-bar 2 attached thereto, from which project side pieces 3. The side pieces 3 are connected by the cross-piece 4, and thus form a loop through which the end of a trace may be attached. Instead of having the side pieces 3 connected by a cross-bar formed integral therewith, as shown in the drawings, I may, if desired, form holes in the side pieces and connect them with a bolt or screw to form

the trace-loop. The eye portion comprises, preferably, an oval-shaped eye 5, having formed on its inner periphery, near the rear end thereof, an inwardly-projecting lug or shoulder 6. As shown in the drawings, the side of said snoulder near the loop is preferably formed with a long sloping curve, as at 7, and the opposite side of said shoulder is substantially vertical or is slightly curved, as at 8, to receive the rounded portion of the whiffletree-hook. It will thus be seen that the shoulder 6 forms a socket or recess into which the whiffletree-hook is adapted to rest, thereby preventing any longitudinal movement of the hook. A flat spring 9 is preferably connected to the forward end of the eye, forming a flexible tongue which extends nearly to the opposite end of the opening and rests in a plane above the shoulder or projection 6.

Any means for fastening the tongue or spring in position may be provided, although in the drawings I have shown the same as having one end inserted in a slot formed in the cockeye, this being the simplest and strongest means that I have been enabled to provide. As shown in Fig. 2, the curved hook 10, which is attached to the whiffletree 11, passes through the cockeye, and a portion thereof rests in front of the shoulder 6, being held against the same and the inner periphery of the cockeye by the pressure of the spring 9 upon the upper side of the hook. In Figs. 3 and 4 I have illustrated a different form of hook with which the eye may be engaged, which comprises a straight piece 12, extending from the whiffletree, having the cross-piece 13 to prevent the eye from slipping over the end thereof.

In order to cause the eye to engage the hooks, it will be seen that the same is first slipped on the hook on the side 7 of the shoulder. The eye is then drawn forward to cause the hook to pass over the shoulder and drop on the side 8 of the shoulder. The flexible tongue bears against the upper side of the whiffletree-hook, and thus forces the same into close engagement with the inner periphery of the hook and with the shoulder, pre-

venting the cockeye from rattling or when the tug becomes slack being disengaged from the hook.

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

10 1. A cockeye having a socket or recess formed on the inner periphery of the eye portion thereof, in which the whiffletree-hook is adapted to rest and means for holding said hook in said socket whereby a longitudinal movement of said hook is prevented.

15 2. A cockeye having a socket or recess formed on the inner periphery thereof, in which the whiffletree-hook is adapted to rest and a flexible tongue for holding said hook in position whereby a longitudinal movement of said hook is prevented.

20 3. A cockeye having a projection formed on the inner periphery thereof, against which the part engaged by said cockeye is adapted to rest and means for holding said part in close engagement with said projection.

25 4. A cockeye having a projection formed on the inner periphery thereof, against which

the part engaged by said cockeye is adapted to rest and a flexible tongue for holding said part in engagement with said projection.

30 5. A cockeye having a projection formed on the inner periphery thereof, against which the part engaged by said cockeye is adapted to rest and a flexible tongue formed of flat spring for holding the part engaged by said cockeye in close engagement with said projection.

35 6. A cockeye having a projection formed on the inner periphery thereof, said projection having one side thereof inclined and the other one substantially straight, and a flexible tongue for holding the part engaged by said cockeye into close engagement with the straight side of said projection and the inner periphery of the cockeye.

40 In witness whereof I have hereunto subscribed my name in the presence of two witnesses. 45

GEO. J. BREITENSTEIN.

Witnesses:

O. J. SALA,

J. ROSS ROBERTSON