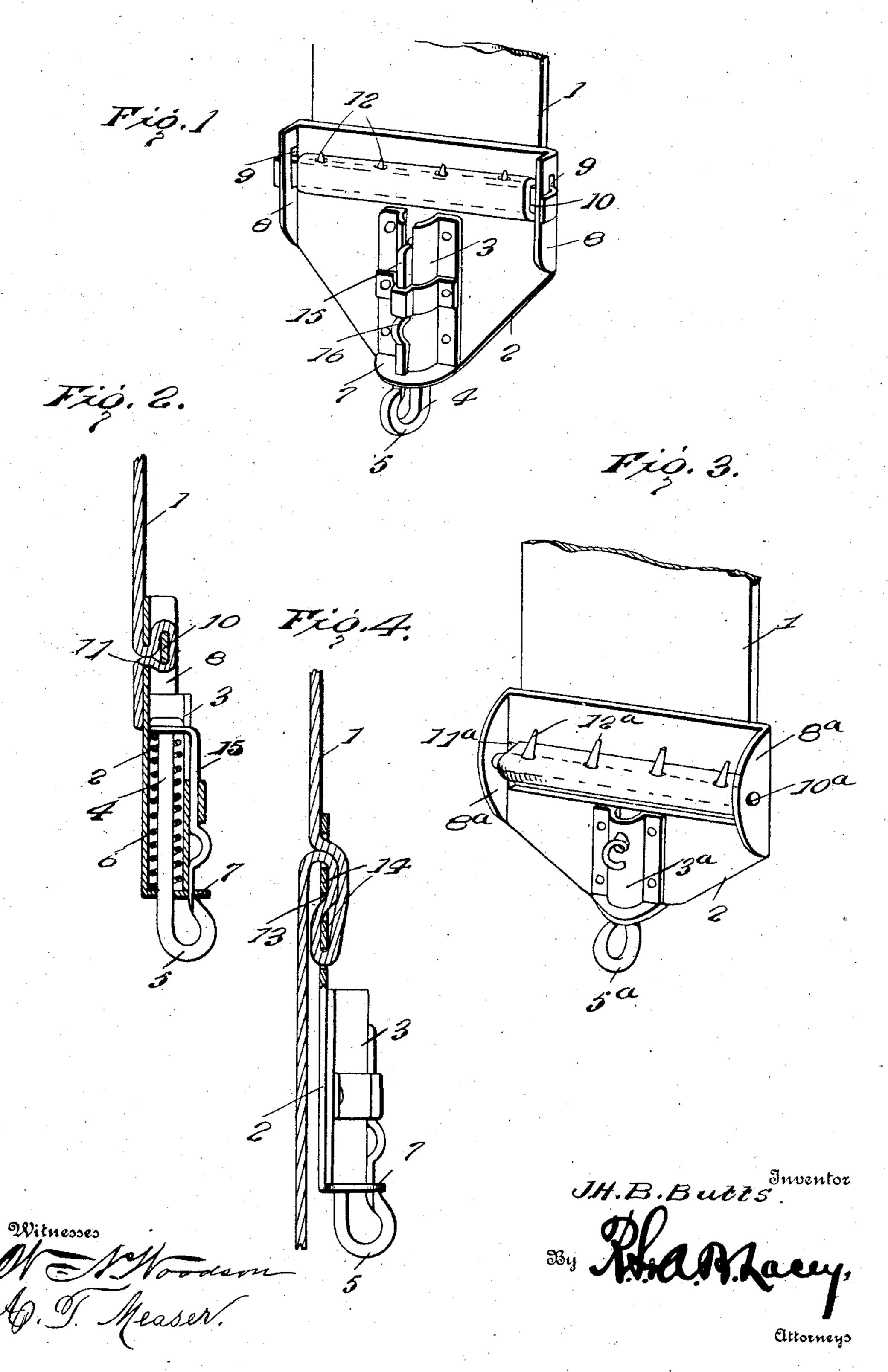
J. H. B. BUTTS.

BACK BAND BUCKLE.

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UNITED STATES PATENT OFFICE.

JOHN H. B. BUTTS, OF PICKARD, GEORGIA.

BACK-BAND BUCKLE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, John H. B. Butts, citizen of the United States, residing at Pickard, in the county of Upson and State of Georgia, have invented certain new and useful Improvements in Back-Band Buckles, of which the following is a specification.

The object of this invention is to provide a novel construction of back band buckle.

The structure of the buckle including the present invention is advantageous in that it affords a peculiar and effective means for connecting the same with the back band and furthermore involves peculiar means for connecting the trace chain with the buckle in such a way as to obviate likelihood of disengagement therefrom and also in such a way as to relieve the draft on the back of the animal, under certain conditions of service.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result, reference is to be had to the following description and

25 accompanying drawings, in which:

Figure 1 is a perspective view of a back band embodying the invention. Fig. 2 is a vertical sectional view through the same. Fig. 3 is a perspective view of a modification.

30 Fig. 4 embodies a vertical section of the modified form of the means for connecting the buckle with the back band.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same

reference characters.

Specifically describing the invention, the back band is indicated at 1, and the buckle comprising the invention at 2. The buckle 40 2 consists of a plate formed with a vertical casing 3 on its outer side, in which is arranged a shank 4 of a hook 5 movably mounted in said housing and normally held in a predetermined position by means of a spring 6 which 45 bears against the head formed at the upper end of the shank 4, said spring being also arranged in the housing or casing 3. An extension 7 projects from the lower end of the plate or buckle body 2 and closes the lower 50 end of the housing 3, the mouth of the hook 5 being normally closed by the extension 7 when said hook is in its normal position under the tension of the spring 6. The hook 5 is adapted to engage with the trace chain in 55 the customary way to support said chain, disengagement of the chain from the hook

being prevented by the spring 6 which cooperates with the hook in such a way as to
hold it with its mouth normally closed by the
extension 7. However, it will be seen that 60
by the spring mounting of the hook 5, the
latter may be held down readily to disengage
the chain therefrom. Another advantage
derived from the mounting of the hook 5 resides in the fact that when the trace chain is 65
engaged with the hook, the latter constitutes
an elastic or spring connection between the
trace chain and the back band, and the draft
animal is relieved from strain which might
be caused by sudden pull or draft on the back. 70

The means provided for securing the buckle to the back band is peculiar. The buckle 2 is formed at its vertical edges with vertical outwardly projecting flanges 8, each of which is provided with a vertical slot 9 in 75 which operates the end portion of a cross bar 10. The cross bar 10 has its ends passed through the slots 9 and bent outwardly to prevent displacement thereof from the flanges 8. Said cross bar is movable ver- 80 tically having a slight amount of play in the slots 9 and the plate from which the buckle 2 is formed is provided with a transverse opening 11 adjacent to the bar 10. In actual use, the back band passes through the opening 11 85 over the cross bar 10 and thence back through the opening 11. The normal tension on the cross bar 10 by reason of its connection with the back band pulls the cross bar into such a position that the same clamps 90 the back band firmly against the longitudinal edge of the opening 11, more effectively preventing slipping of the back band through the buckle. To facilitate the above the cross bar 10 may be provided with a plurality 95 of projections 12 extending from its upper edge to positively engage with the back band.

The modification of the invention illustrated in Fig. 3 is substantially the same in form as the construction shown in Figs. 1 100 and 2 save that the hook 5^a is mounted in a slightly different manner so far as regards its connection with the housing or casing 3^a.

In this construction also the cross bar 10^a adjacent to the opening 11^a of the buckle, is 105 pivotally mounted in the flanges 8^a, being formed with a plurality of projections 12^a, however, to engage with the back band in an obvious manner.

Fig. 4 embodies a further modification in 110 which the back band is attached to the buckle in a different way from any hereto-

fore described. In this instance the upper portion of the buckle is formed with an opening 13 across which extend spaced cross bars 14. The back band is passed first over the upper cross bar and the lower cross bar, thence under the lower cross bar and up again over the uppermost cross bar. This arrangement causes the back band to frictionally bind against itself in order to positively hold the same in connection with the buckle. The construction is simple and is very advantageous under certain conditions.

In the preferred embodiment of the inventor

In the preferred embodiment of the invention shown in Figs. 1, 2 and 4 a longitudinally disposed spring rod 15 is slidably mounted upon the outer side of the casing or housing 3, the upper end of the rod extending inwardly within the casing and being attached to the shank 4 of the hook 5 so as to move simultaneously therewith while the opposite end extends through an opening in the extension 7 and engages the extremity of the hook 5. If found desirable a loop 16 may be formed by crimping an intermediate portion of the rod, the said loop being designed to receive the plow line. When the hook 5 is

drawn outwardly against the tension of the spring 6 the lower end of the rod 15 slides through the opening in the extension 7 until the crimped portion 16 abuts against the latter. That portion of the rod 15 projecting beyond the extension 7 can then be readily bent inwardly and deflected owing to

its spring action in such a manner as to enable a chain or like member to be engaged with or disengaged from the hook 5.

Having thus described the invention, what is claimed as new is:

1. In a back band buckle, the combination of a plate, means at one end of the plate for 40 connecting the same with a back band, a housing at the opposite end of the plate, a guide member carried by the housing on the exterior thereof, a hook having the shank portion thereof slidably mounted within the 45 housing, a spring located within the housing and operating to normally hold the hook in a predetermined position, and an extension projecting from the plate and serving the double function of closing one end of the 50 housing and also of normally closing the mouth of the hook.

2. In a back band buckle, the combination of a body portion, means at one end of the body portion for forming a connection with 55 the back band, a housing at the opposite end of the body portion of the buckle, a longitudinally extending rod on the exterior of the housing, said rod being provided with a guide member, a hook having the shank 60 thereof slidably mounted within the housing, and a spring located within the housing and coöperating with the shank to normally hold the hook in a predetermined position.

In testimony whereof I affix my signature 65

in presence of two witnesses.

JOHN H. B. BUTTS. [L. s.]

Witnesses:

E. R. Ingram, C. E. Bethel.