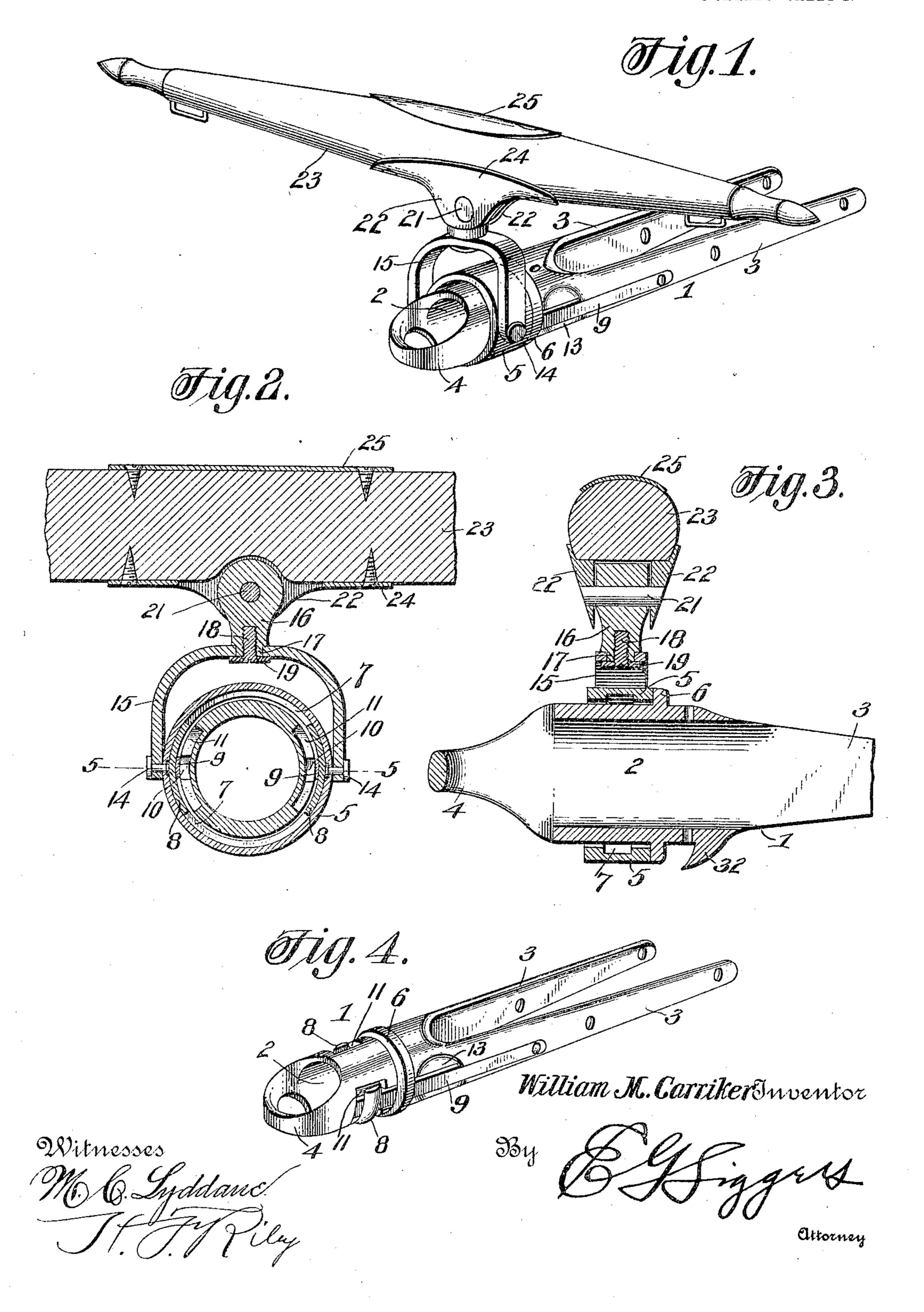
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APPLICATION FILED JAN. 14, 1905.

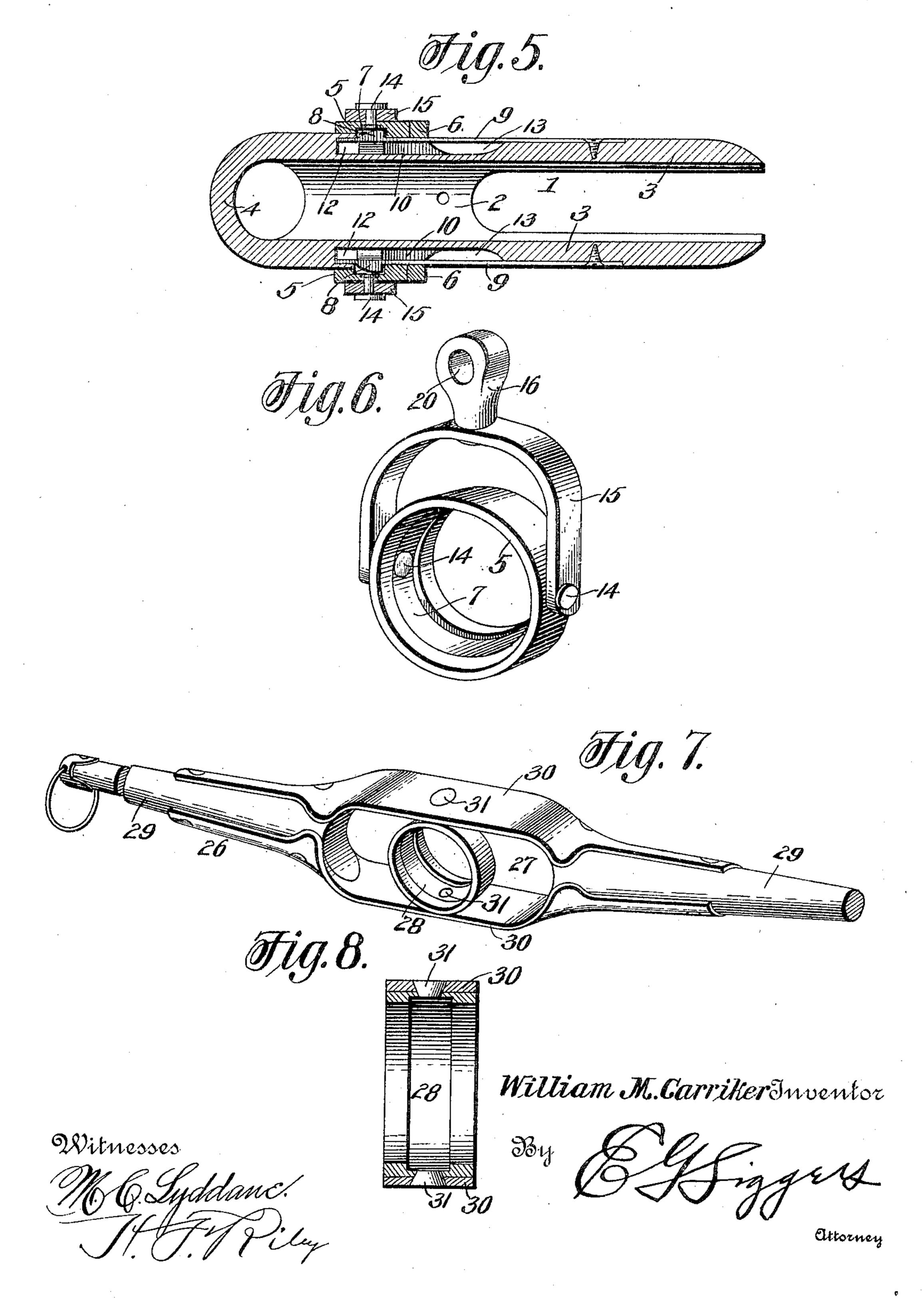
2 SHEETS-SHEET 1.



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2 SHEETS-SHEET 2.



UNITED STATES PATENT OFFICE.

WILLIAM MONROE CARRIKER, OF IRVING, ILLINOIS.

NECK-YOKE.

No. 812,822.

Specification of Letters Patent.

Patented Feb. 20, 1906.

Application filed January 14, 1905. Serial No. 241,097.

To all whom it may concern:

Be it known that I, William Monroe Carriker, a citizen of the United States, residing at Irving, in the county of Montgomery and State of Illinois, have invented a new and useful Neck-Yoke, of which the following is a specification.

The invention relates to improvements in

neck-yokes.

The object of the present invention is to improve the construction of neck-yokes, more especially the neck-yoke center or the means for connecting a neck-yoke with a tongue or pole, and to provide a simple, inexpensive, and efficient construction designed for use on all kinds of vehicles, mowers, and binders adapted to permit a neck-yoke to be readily applied, to and removed from a tongue or pole and capable of securely connecting the neck-yoke and the tongue or pole and of effectually preventing the same from becoming disconnected when the parts are in use.

A further object of the invention is to provide a device of this character capable of adjusting itself automatically to the movement of the neck-yoke and the tongue or pole and adapted to arrange the neck-yoke close to the extreme end of a tongue or pole, so that the latter will not project and catch into a fence or the like should the team be hitched

to one of the posts.

The invention also has for its object to provide a construction in which the lines will not catch and which will permit an ordinary neckyoke to be used on a pole or tongue tempora-

rily, if desired.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in the form, proportion, size, and minor details of construction within the scope of the claims may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of a neck-yoke constructed in accordance with this invention. Fig. 2 is a vertical sectional view taken longitudinally of the neck-yoke. Fig. 3 is a similar view taken longitudinally of the pole-tip. Fig. 4 is a perspective view of the pole-tip. Fig. 5 is a

horizontal sectional view on the line 5 5 of Fig. 2. Fig. 6 is a perspective view of the pole-engaging ring and the upper and lower coupling members. Fig. 7 is a perspective 60 view of the neck-yoke, illustrating a modification of the invention. Fig. 8 is a vertical sectional view of the same.

Like numerals of reference designate corresponding parts in all the figures of the draw- 65

ings.

1 designates a pole-tip, having a socket 2, and adapted to fit over the front end of a tongue or pole. The sides of the tip are extended beyond the socket to form arms 3, 7° which are perforated for the reception of suitable fastening devices for securing the tip to a pole or tongue. The outer end 4 of the tip is rounded and is provided with an opening. The front portion of the tip is adapted 75 to receive a neck-ring 5, and it has an annular flange or rib 6, forming a stop for the neck-relar ring.

yoke ring.

The neck-yoke ring, which is provided with an interior annular groove 7, is locked on the 80 tip by a pair of oppositely-disposed catches 8, consisting of curved heads or engaging portions spaced from the rib and mounted on longitudinal springs 9, and adapted to extend into the annular groove of the neck-yoke ring 85 when the latter is placed on the tip. The springs, which extend longitudinally of the pole-tip at opposite sides thereof, are arranged in longitudinal grooves 10 of the same and are secured at their inner ends to the tip. The 90 tip is provided at the front ends of the grooves with intersecting recesses 11, arranged to receive the engaging portions or heads of the catches for permitting the same to be moved inwardly out of engagement with the neck- 95 yoke ring. The springs extend forwardly beyond the heads or engaging portions of the catches, and project into front sockets 12, formed in the walls of the recesses 11. The springs extend beneath the annular rib or 100 flange 6 and have their outward movement limited by the same. The outer faces of the engaging portions of the catches are beveled toward the front to enable the neck-yoke ring to be readily placed on the pole-tip, and 105 the rear edges of the heads or engaging portions form shoulders for retaining the neckyoke ring on the pole-tip. The pole-tip is cut away at opposite sides in rear of the annular rib or flange to form depressions 13, 110 adapted to permit the springs to be readily pressed inward by the thumb and forefinger.

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The neck-yoke ring is adapted to rotate on the end of the pole-tip, and it is pivoted at opposite sides by rivets 14 or other suitable pivots to the lower terminals of the sides of an 5 arched member 15, which constitutes the lower sections of a coupling and which is pivoted at the center of its top to an upper coupling block or member 16. The arched coupling member 15, which is arranged to swing 10 backward and forward, is provided at its top with an opening to receive the lower end 17 of the upper coupling member or block 16, which is rounded to form a vertical pivot and which is secured to the arched member by 15 means of a screw 18 and a disk or plate 19. The screw 18 pierces the disk or plate and engages the coupling member 16; but any other suitable means may be employed for securing the parts together. The upper coupling 20 block or member is provided with a transverse opening 20, arranged horizontally when the coupling block or member is vertical, and adapted to receive a transverse pivot 21, which also pierces a pair of ears 22 of a neck-25 yoke 23. The ears 22, which are spaced apart, are formed integral with the lower plate 24 of the neck-yoke, which is also provided with an upper plate 25. These plates, which are secured to the neck-yoke by suitable fastening devices, are adapted to reinforce the same at the center. The neck-yoke ring is capable of a rotary movement on the pole-tip. The arched coupling member is adapted to swing backward and forward, and the upper 35 coupling member has a rotary movement on the lower arched coupling member. The neck-yoke is also pivotally connected with the upper coupling member and is arranged to swing laterally of the tongue or pole. By 40 this construction the connection between the neck-yoke and the tongue or pole is adapted to adjust itself automatically to the movement of the said parts.

In Fig. 7 of the drawings is illustrated a 45 modification of the invention, the neck-yoke 26 being provided with a central opening 27, in which is mounted a neck-yoke ring constructed like that heretofore described and provided with an annular groove 28 for en-50 gagement with the spring-actuated catches of the pole-tip. The neck-yoke 26 is composed of end portions or sections 29, connected by plates or straps 30, arranged at the top and bottom of the neck-yoke and having 55 extended ends overlapping the inner portions of the sections 29. The neck-yoke ring is provided with upper and lower pivots 31, which are arranged in openings of the top and bottom connecting-straps of the neck-60 yoke.

The ends of the neck-yokes 23 and 26 are provided with suitable means for receiving the straps, chains, or other suitable flexible connections for connecting the neck-yokes with the rings.

The pole-tip is provided at its bottom with a depending lug 32, spaced from and located in rear of the annular rib and adapted to engage the ring of an ordinary neck-yoke to enable the same to be temporarily used when desired.

It will be seen that the neck-yoke is simple and comparatively inexpensive in construction, that it is adapted to be used on variour kinds of vehicles and farm implements, and 75 that the tongue or pole will not catch in a fence when a team is hitched thereto or the lines become entangled with the neck-yoke.

Having thus fully described my invention, what I claim as new, and desire to secure by 80 Letters Patent, is—

1. In a device of the class described, the combination of a neck-yoke provided with a ring having an interior groove, a pole-tip receiving the ring, the latter being adapted for 85 rotary movement on the former, and a catch carried by the pole-tip for engaging the annular groove of the ring.

2. In a device of the class described, the combination of a neck-yoke, a neck-yoke 90 ring, an arched coupling member piveted at opposite sides to the ring, and an upper coupling member pivoted to the top of the arched coupling member to permit the neck-yoke to swing horizontally, and also pivoted to the 95 neck-yoke for enabling the same to swing transversely of the pole.

3. In a device of the class described, the combination with a neck-yoke, of a pole-receiving neck-yoke ring, an arched member 100 pivotally connected to the ring at opposite sides thereof and arranged to swing longitudinally of the pole, and an upper coupling member mounted for rotation on the arched coupling member to permit the neck-yoke to 105 swing horizontally, said upper coupling member being also pivoted to the neck-yoke, the pivot being arranged to permit the neck-yoke to swing laterally of the pole.

4. In a device of the class described, the 110 combination of a pole-tip having an annular shoulder and provided with a longitudinal groove extending beneath the shoulder, said tip being also provided at the front end of the groove with a recess, and a catch operating 115 in the recess and having a spring arranged in the groove and extending beneath the shoulder, and having its outward movement limited by the same.

5. In a device of the class described, the 120 combination of a tip provided with an annular rib and having a longitudinal groove extending beneath the rib, said tip being also provided at the front end of the groove with a recess and having a socket in the front wall 125 thereof, a spring arranged in the groove and extending into the socket, and a head mounted on the spring and spaced from the rib the latter being arranged to form a stop for limiting the outward movement of the spring. 130

6. In a device of the class described, the combination of a tip having an annular rib, catches located in advance of and spaced from the rib and provided with springs ex-5 tending beneath and having their outward movement limited by the same, said catches being beveled at the front, and a neck-yoke having a ring arranged on the tip and en-

gaged by the catches.

7. In a device of the class described, the combination of a neck-yoke having a ring provided with an interior groove, and means designed to be mounted on a pole and engaging the groove, said means permitting the 15 ring to have a rotary movement on the pole and retaining the former on the latter throughout the entire rotary movement of the said ring.

8. In a device of the class described, the 20 combination of a neck-yoke having a ring provided with an interior annular groove, and

a catch extending into the groove for detachably retaining the ring on a pole, said catch permitting the ring to have a rotary movement on the pole.

9. In a device of the class described, the combination of a neck-yoke provided with a ring pivoted at its outer face at diametrically opposite points and provided with an interior groove, and a catch designed to be mounted 30 on a pole and engaging the groove of the ring and permitting it to have a rotary movement thereon and retaining the ring on the pole throughout the entire rotary movement of $ext{the former.}$

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM MONROE CARRIKER.

Witnesses:

MAUDE MOORE, JENNIE MOORE.