

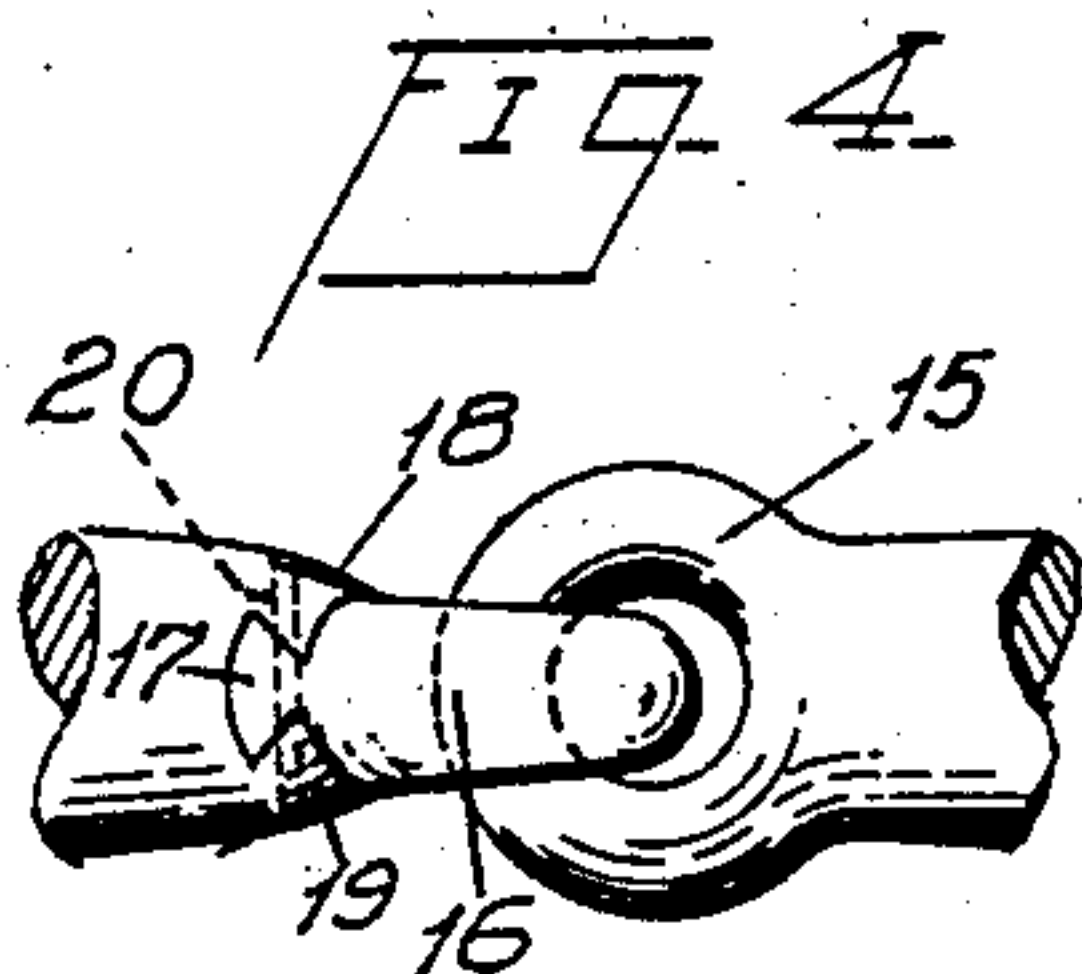
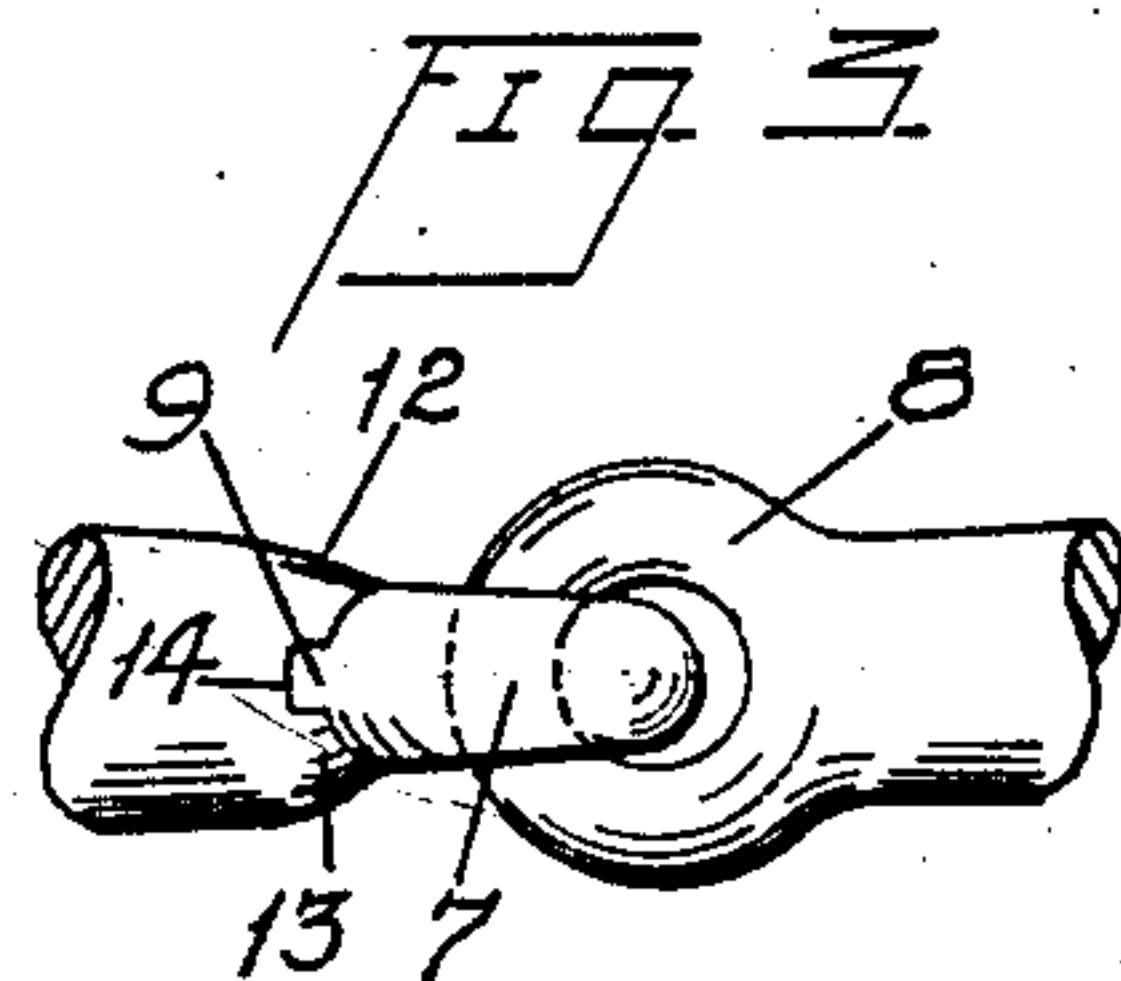
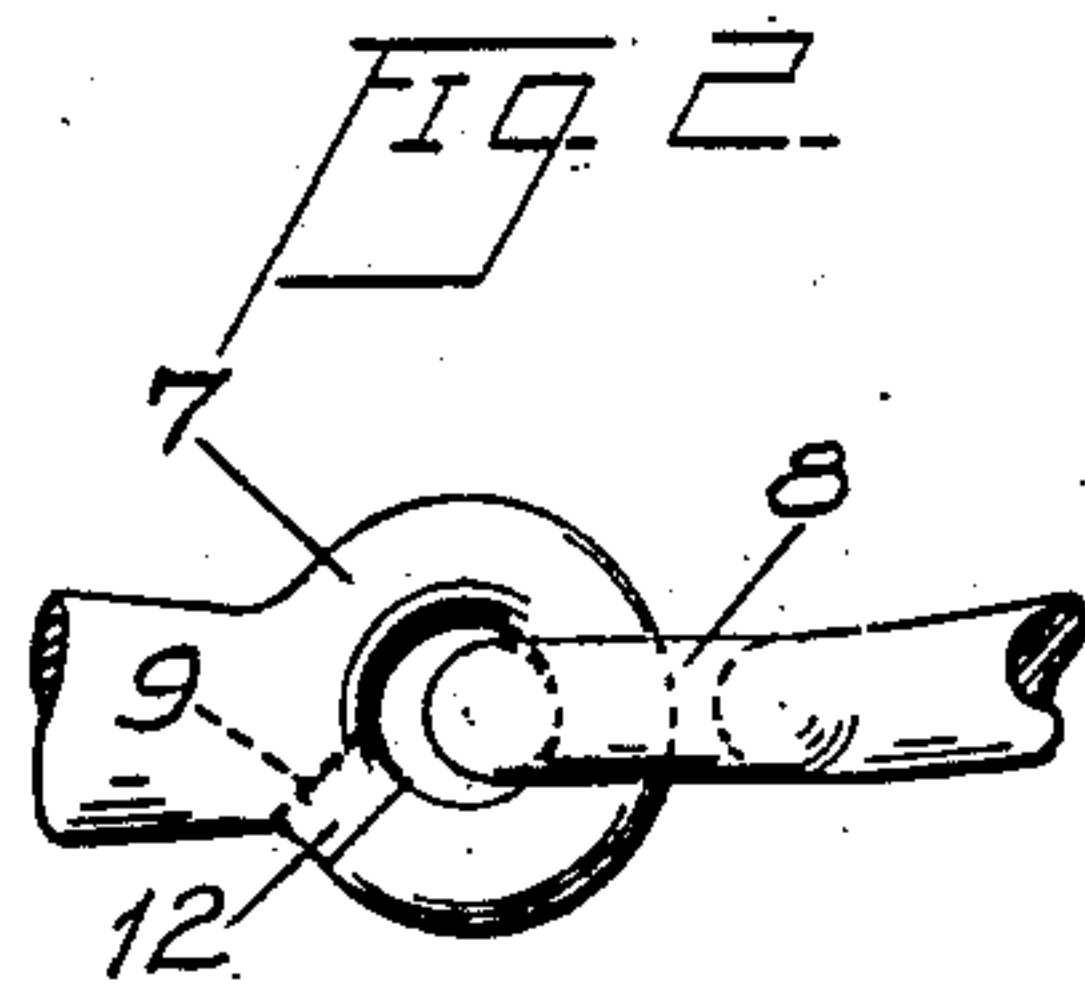
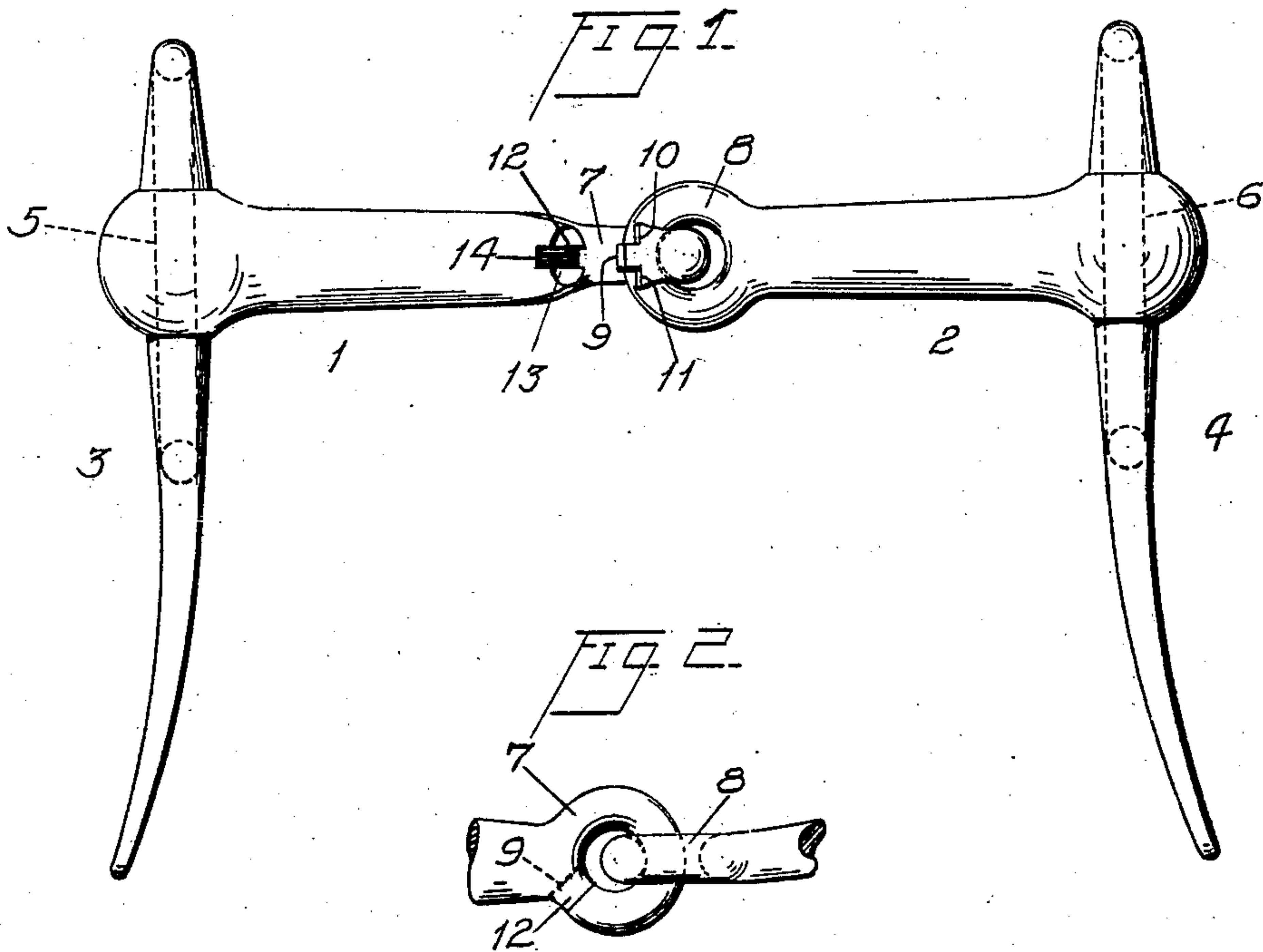
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PATENTED APR. 7, 1908.

J. GAERTNER.

HORSE BIT.

APPLICATION FILED AUG. 27, 1907.



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JOHN GAERTNER, OF NEWARK, NEW JERSEY.

HORSE-BIT.

No. 884,084.

Specification of Letters Patent.

Patented April 7, 1908.

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To all whom it may concern:

Be it known that I, JOHN GAERTNER, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Horse-Bits, of which the following is a specification.

This invention relates to that class of horse bits in which the mouth piece is made of two pieces linked together to form a jointed bar, and the objects of the present improvement are to secure a more positive connection and one which shall not be liable to become inadvertently unfastened by the constant strain of the reins or the continual movement or action of the horse's mouth; to obviate liability of the hook and eye members of the bit being twisted out of place in use; to provide an inexpensive construction, and to obtain other advantages and results as may be brought out in the following description.

Referring to the accompanying drawings, in which like numerals of reference indicate corresponding parts in each of the several figures, Figure 1 is a front elevation of a jointed bit illustrating my improved hook and eye connection open; Fig. 2 is a plan of the said hook and eye connection closed; Fig. 3 is a front elevation of the same closed, and Fig. 4 is a front view of a certain modified construction.

In said drawings, 1 indicates the hook member, of a jointed bit and 2 the eye member, the same members being provided at their outer ends with the usual cheek parts 3, 4 having rein rings 5, 6. Heretofore the link connection of the hook and eye members has been effected by passing the hook 7 through the eye 8, and then bending or pressing the free end of the hook inward against its base to close the same, the joint thus formed being also soldered in the best bits. By constant use, however, the eye in such a connection became opened by twisting, and the soldering loosened, so that the links were liable to part or the sharp edges of the solder and hook to lacerate the horse's mouth. In avoiding these objections by my invention, I form a tongue 9 at the free end of the hook 7, said tongue being flattened or narrowed in the plane of the hook, and shoulders 10, 11 being formed at its base. Lugs 12, 13 are also formed at the base of the hook, said lugs being shaped at their bases to conform to the shape of the body portion of the hook mem-

ber 7, thus strengthening and reinforcing the lugs as well as providing a smooth rounded construction agreeable to the horse's mouth. The said lugs are tapered or reduced outwardly to abrupt ends which are adapted to fit against the shoulders 10, 11 before described, and provide parallel facing sides adapted to receive between themselves the said tongue 9. After the hook 7 is passed through the eye 8, its free end is pressed or bent inward to close the hook and form the link connection, and in doing this the said tongue 9 enters the groove 14 formed between the lugs 12, 13 and the ends of said lugs abut against the shoulders 10, 11. The lugs 12, 13 are then hammered together to pinch the tongue 9, and if desired soldering may also be employed. Obviously, the joint thus formed is secure and strong and nothing will tend to open it except an outward strain on the hook end in the plane of said hook, and this can hardly occur in practice. No twisting strain, which is the most common one to which bits are subjected will have any effect on my improved joint.

Referring now to Fig. 4 more particularly, 15 indicates an eye and 16 a hook having a dove-tail tongue 17 adapted to enter between lugs 18, 19 having correspondingly undercut facing walls to engage said dove-tail tongue. In joining the members, the lugs 18, 19 may be bent outward sufficiently to permit the wide portion of the dove-tail to pass between as the hook is closed, and then the lugs are forced inward against the tongue. This is even more secure than the construction first described. For still greater security in either construction, a pin 20 may be passed through the lugs and tongue, as indicated in dotted lines in Fig. 4.

Having thus described the invention, what I claim as new is:

1. In a jointed bit, the combination with an eye member, of a hook member having a groove at the base of the hook with an undercut wall, and a dove-tail extremity adapted to enter said groove when the hook is closed.

2. In a jointed bit, the combination with an eye member, of a hook member having a groove at the base of the hook on the side toward which the hook bends, said groove being in the plane of the hook and opening at its end though the outer surface of the hook member, and a reduced tongue at the end of the hook flattened in the plane of the

hook and adapted to enter said groove as the hook is closed.

3. In a jointed bit, the combination with an eye member, of a hook member having
5 lugs at the base of the hook on the side toward which the hook bends, said lugs forming between themselves a groove which lies in the plane of the hook and is open at both ends and having abrupt ends, and a reduced
10 tongue at the end of the hook flattened in

the plane of the hook and forming shoulders on both sides of its base, said tongue being adapted to enter said groove between said lugs as the hook is closed and said shoulders to engage the ends of the lugs.

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Witnesses:

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