

J. Letchworth,

Bridle Bit.

N^o. 90,857. Patented June 1, 1869.

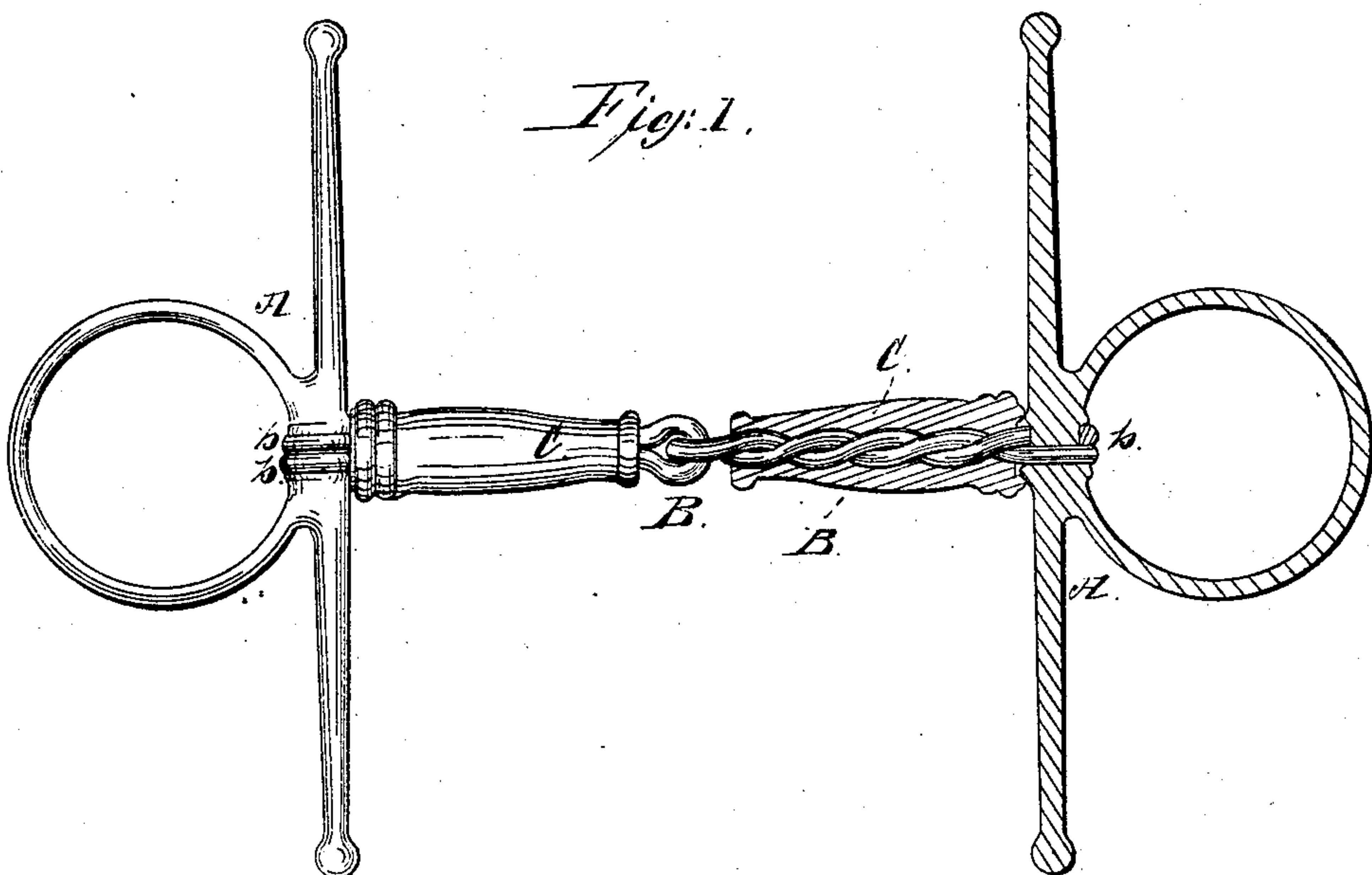
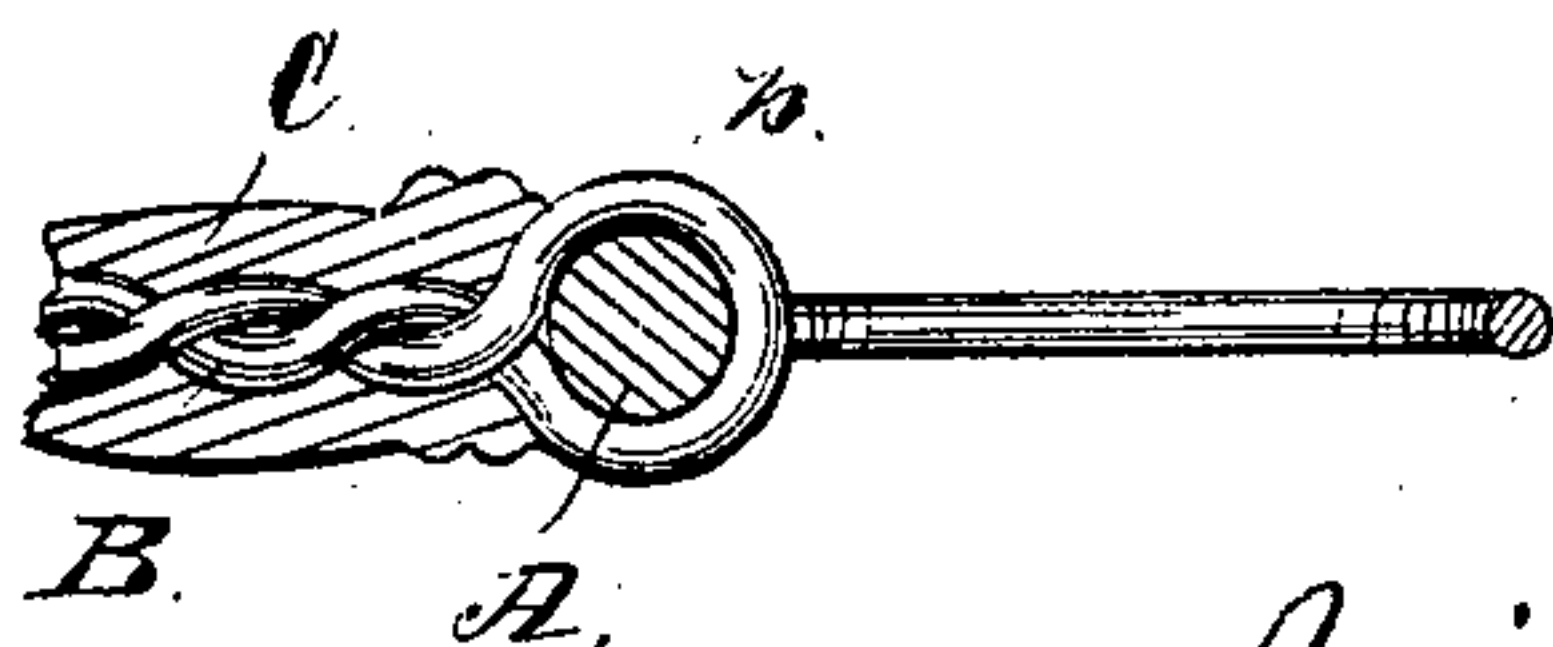


Fig: 2.

Witnesses:



Wm. H. Beebe
Geo. J. Bonner.

Inventor:

Josiah Letchworth
by Farnish & Heydt
attys

United States Patent Office.

JOSIAH LETCHWORTH, OF BUFFALO, NEW YORK.

Letters Patent No. 90,857, dated June 1, 1869.

IMPROVED BRIDLE-BIT.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, JOSIAH LETCHWORTH, of the city of Buffalo, in the county of Erie, and State of New York, have invented a certain new and useful Improvement in Bridle-Bits; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, in which—

Figure I is a view of my improved bit, represented distended.

Figure II is a sectional detached view.

Like letters refer to like parts in both figures.

The mouth-piece of bridle-bits is usually composed either of wrought or of malleable iron. When made of wrought-iron, it generally consists of twisted wire. This forms a cheap bit, and one of great strength; but it is objectionable for general use on account of the liability of the twisted wire to cut or abrade the animal's mouth.

The malleable bit is cast with a hook at each end, to engage with the cheek-pieces, the connection being made by closing the hook after the mouth-piece has been annealed, forming what may be termed a "cold joint."

This construction of bit enables the mouth-piece to be made smooth, and of any required size, which obviates the objection raised to the wire bit.

This bit, however, is also objectionable, from the fact that the bending of the hooks of the mouth-piece, in forming the joint with the cheek-pieces when the metal is cold, frequently causes a partial fracture, which renders the connection in many instances insecure.

This imperfection of the joint being ordinarily not discernible, renders such bits unsafe for use, especially with spirited horses.

The object of my improvement is the production of

a mouth-piece for bridle-bits, that shall possess the smoothness and size of the malleable bit, and the strength and reliability of a wrought-iron one.

The invention consists in the combination, with a wrought-iron or wire bit, of a cast-iron sleeve or mouth-protector, cast around the mouth-piece after the joints between it and cheek-pieces have been made.

In the drawings—

A A represent the cheek-pieces, and B B the two portions of a wire mouth-piece, linked together at the centre, and jointed to the cheek-pieces by bending the two ends *b b* of the wire of each half around the ring thereof, in opposite directions, as shown in Fig. II.

The bit thus formed is placed in the sand, and the sleeves, or mouth-protectors *c c*, of the required shape and size, are cast around the mouth-piece, as clearly represented.

In addition to protecting the horse's mouth, these protectors, being cast so as to extend close to the joints with the cheek-pieces, enclose the ends *b* of the wire, and firmly secure them in place, thus preventing the possibility of their being extended by any strain to which a bit is ever subjected.

The great importance of having a bit that is thus secure against any liability of the parts breaking, or the connections giving way, is sufficiently obvious.

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

The combination, with a wrought-iron mouth-piece of a bridle-bit, of the sleeves or mouth-protectors *C* cast thereon, substantially as set forth.

JOSIAH LETCHWORTH.

Witnesses:

JAY HYATT,

JNO. J. BONNER.