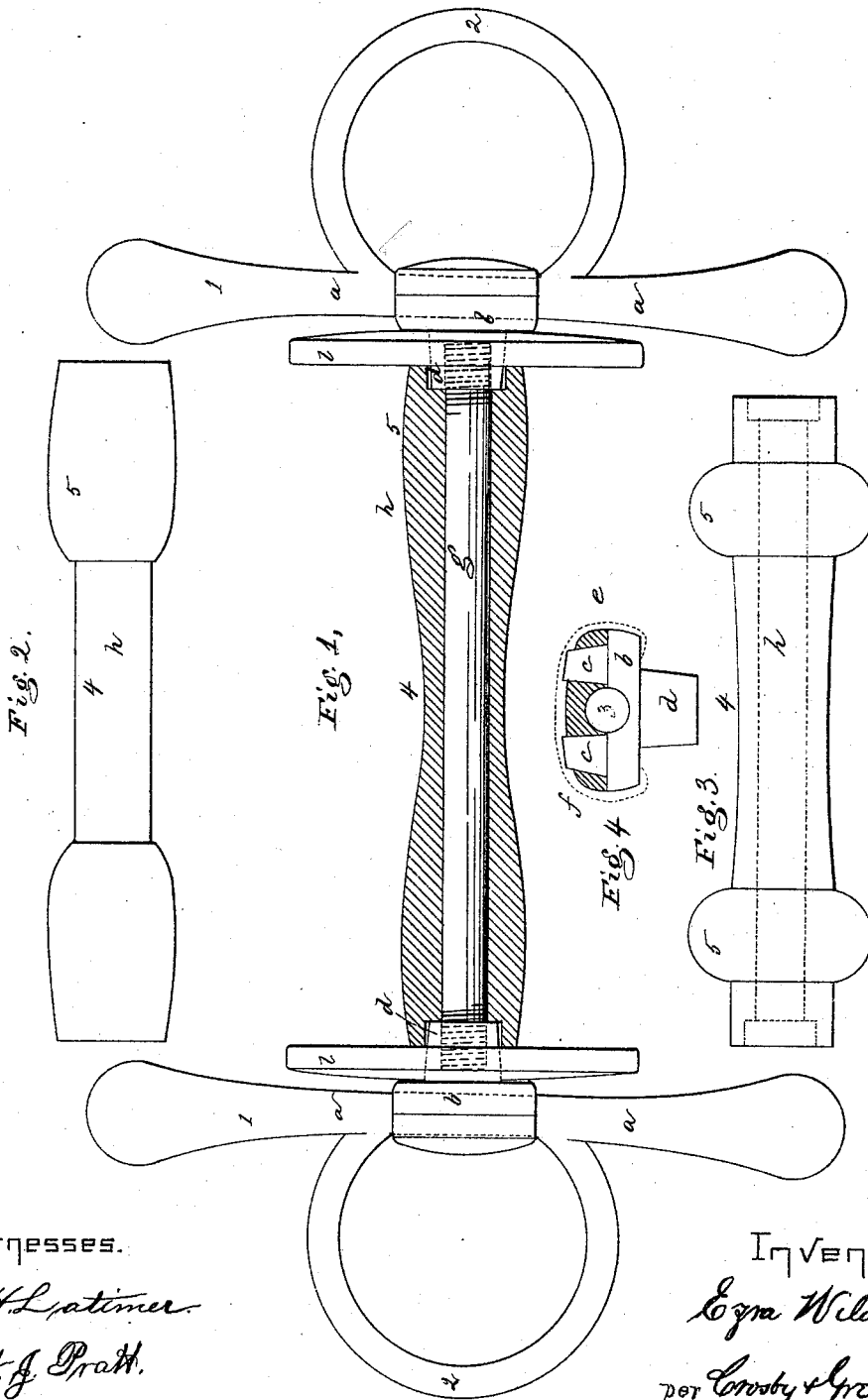


E. WILDER.
BRIDLE-BITS.

No. 184,026.

Patented Nov. 7, 1876.



Witnesses.
Leah L. Patimer
W. J. Pratt

Inventor.
Egna Wilder
per *Crosby & Gregory*

UNITED STATES PATENT OFFICE.

EZRA WILDER, OF SOUTH HINGHAM, MASSACHUSETTS.

IMPROVEMENT IN BRIDLE-BITS.

Specification forming part of Letters Patent No. **184,026**, dated November 7, 1876; application filed September 22, 1876.

To all whom it may concern:

Be it known that I, EZRA WILDER, of South Hingham, in the county of Plymouth and State of Massachusetts, have invented Improvements in Bridle-Bit, of which the following is a specification:

This invention relates to improvements in bridle-bits; and consists in a bit having its bar or mouth-piece covered with a wooden shell; also, in the combination, with the cheek-pieces and bar, of a cheek-piece holder, substantially as hereinafter described.

Figure 1 represents one of my improved bridle-bits in longitudinal section; Figs. 2 and 3, modified forms of wooden shells; and Fig. 4, a detail of the cheek-piece holder, the caps being in section.

The cheek-pieces *a* are cast or formed in any usual way, the bar *1*, to which the ring *2* is connected, being preferably in one solid piece from end to end. The holder for the cheek-piece is composed of a base, *b*, provided with prongs *c*, or equivalents, an internally-screw-threaded portion, *d*, and a cap-piece, *e*, the base and cap-piece being adapted, as at *3*, to receive between them a portion of the vertical bar *1* of the cheek-piece. The cheek-piece is placed in position between *b* and *c*, and the prongs are then riveted, thereby holding the cheek-piece securely within the opening provided for that purpose in the holder. A plated or other covering-cap, *f*, (see dotted lines, Fig. 4,) may be placed over the holder, for purposes of ornamentation. The bar *g*, of metal, is screw-threaded at each end, to enter the portion *d*. The shell *h*, of wood, usually of hard wood, is preferably reduced at its center, as at *4*, to afford room for the tongue under it, and at *5* it will be enlarged, to be easy in the mouth.

In Fig. 3 the enlarged portions *5* are adapted

to bear upon the gums in the mouth of the horse, such form of bit being preferable with horses hard to hold.

I have ascertained by practical trials that horses will not chew the wooden shell, and that such shell is not objectionable, as is a metallic mouth-piece.

A wooden shell is cheaper than one of leather or of india-rubber, and I consider it more durable than either.

In putting the bit together, I prefer to employ washers *l* of leather, or any suitable material, between the ends of the shell and the cheek-pieces.

I do not desire to limit this invention to the particular forms of shell shown, as other forms may be made; but I prefer in all forms of bridle-bits to have the central portion smallest.

If desired, this shell might be covered with leather, cloth, or india-rubber; but I prefer to use it uncovered.

I claim—

1. The combination, with the bar of a bridle-bit, of a wooden shell, substantially such as described.

2. The combination, with the cheek-piece, of the screw-threaded holder, constructed and adapted to be applied to the cheek-piece, substantially as described.

3. The holders *b c d e*, in combination with the bar *g* and cheek-pieces, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EZRA WILDER.

Witnesses:

G. W. GREGORY,
W. J. PRATT.