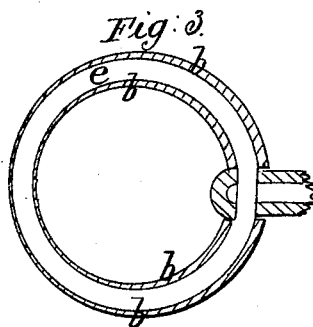
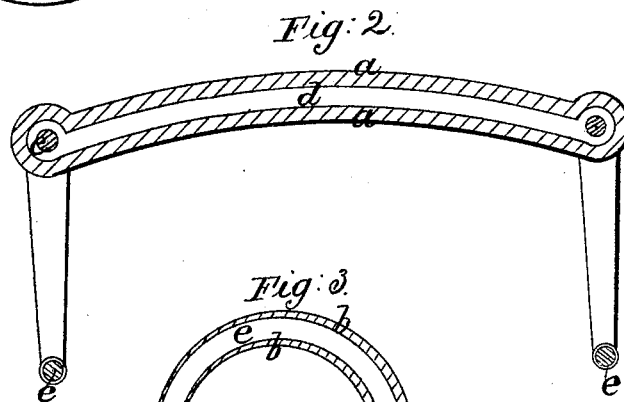
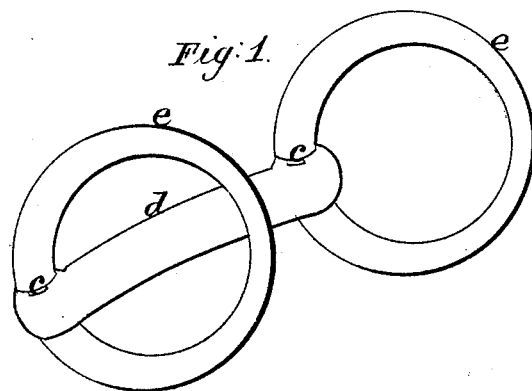


*E. Day,*  
*Bridle Bits,*  
*No 51,151,                      Patented Nov. 28, 1865.*



*Witnesses;*  
*Henry T. Brown*  
*Laura Holmes Jr.*

*Inventor;*  
*Edmund Day*

# UNITED STATES PATENT OFFICE.

EDMUND DAY, OF WEST SPRINGFIELD, MASSACHUSETTS.

## IMPROVEMENT IN BRIDLE-BITS.

Specification forming part of Letters Patent No. **51,151**, dated November 23, 1865.

*To all whom it may concern:*

Be it known that I, EDMUND DAY, of West Springfield, in the county of Hampden and State of Massachusetts, have invented a new and useful Improvement in Bridle-Bits; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of a bit. Fig. 2 is a longitudinal section through the center. Fig. 3 exhibits a section of one of the rings and a portion of the mouth-piece.

Similar letters of reference indicate corresponding parts in the several figures.

The main object of this invention is to provide a superior substitute for a leather-covered bit; and to this end it consists in a metal bit covered with hard vulcanized india-rubber or gutta-percha.

The advantages which a bit so covered has over one covered with leather are very great, for the leather covering becomes soft, spongy, and filthy, and thus requires frequent renewing; besides, it is difficult to wash it clean; but the bit covered with hard vulcanized india-rubber or gutta-percha is very durable, is easily washed, is smooth and easy to the mouth of the horse, does not rust, and can be made less clumsy than the leather-covered bit. It is more pleasant to the horse than a naked metal bit, not only on account of its being softer,

but owing to the india-rubber and gutta-percha being poor conductors of heat, and therefore not chilling the horse's mouth in cold weather; and, moreover, the covering is very durable.

My bit—that is, the metal portion of it—is to be covered with the gum which has been prepared for vulcanization while such gum is in the plastic state. This may be done by wrapping the gum around the metal in sheets or strips or by placing the metal bit into a mold and pressing the gum around it to the desired thickness. The gum is afterward vulcanized on the bit by the application of heat in the usual manner. Upon the mouth-piece *d*, I place a reasonable thickness of gum, substantially the same all over, as shown at *a* in Fig. 2.

That part of the covering of the side pieces or rings *e e* which is nearest the joint *c*, connecting them with the bit or mouth-piece, is thicker, and the thickness gradually decreases toward its opposite side, as is shown at *c b* in the drawings.

Having thus described my invention, I claim and desire to secure by Letters Patent as a new article of manufacture—

A bridle-bit composed of metal covered with hard vulcanized gum, substantially as herein described.

EDMUND DAY.

Witnesses:

HENRY T. BROWN,  
J. W. COOMBS.