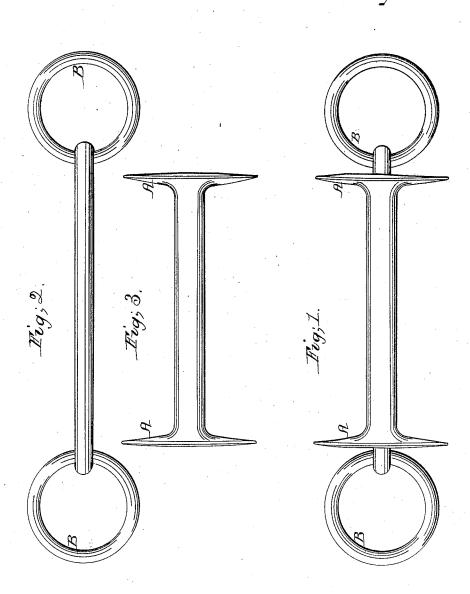
## I. S. Balch, Bridle Bit, Patented Fug. 23,1839.

Nº 1,299.



## UNITED STATES PATENT OFFICE.

DAN SHAW BALCH, OF BRADFORD, VERMONT.

BRIDLE-BIT FOR HORSES, &c.

Specification of Letters Patent No. 1,299, dated August 23, 1839.

To all whom it may concern:

Be it known that I, Dan Shaw Balch, of Bradford, in the county of Orange and State of Vermont, have invented a new and 5 useful Improvement in Bridle-Bits for Animals, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

The nature of my invention consists in

10 placing a revolving iron spool with deep collars upon the ordinary bit for reducing friction or rubbing against the mouth of the animal.

To enable others to make my improvement 15 I will proceed to describe its construction.

Figure 1 represents the spool and bit together. Figs. 2 and 3 represent them detached.

Similar letters refer to similar parts.

The revolving iron spool is about five and a half inches in length and five eighths of an inch in diameter in the middle. At the distance of about half an inch from either extremity the spool begins to expand in diameter until it terminates in a collar (A) 25 at either end of about two and a half inches in diameter. Through this spool, which is perforated longitudinally through the center, passes a straight iron wire or bit one quarter of an inch in diameter, on which 30 the spool revolves; and at each extremity of this wire it is formed into an eye through which is passed a round ring—one at each end—to which the reins and head stall are made fast. The bridle is in other respects 35 made like the common bridle and is applied in the usual manner.

The invention claimed and desired to be secured by Letters Patent consists in-

The combination of the wire bit and re- 40 volving spool, constructed as before described, in the manner herein set forth for reducing the friction of the bit against the animal's mouth—to which it is applied.

DAN SHAW BALCH.

Witnesses:

GEO. WILLIS, ION KITTREDGE.