

J. A. FAIRBANKS.

BRIDLE BIT.

No. 251,424.

Patented Dec. 27, 1881.

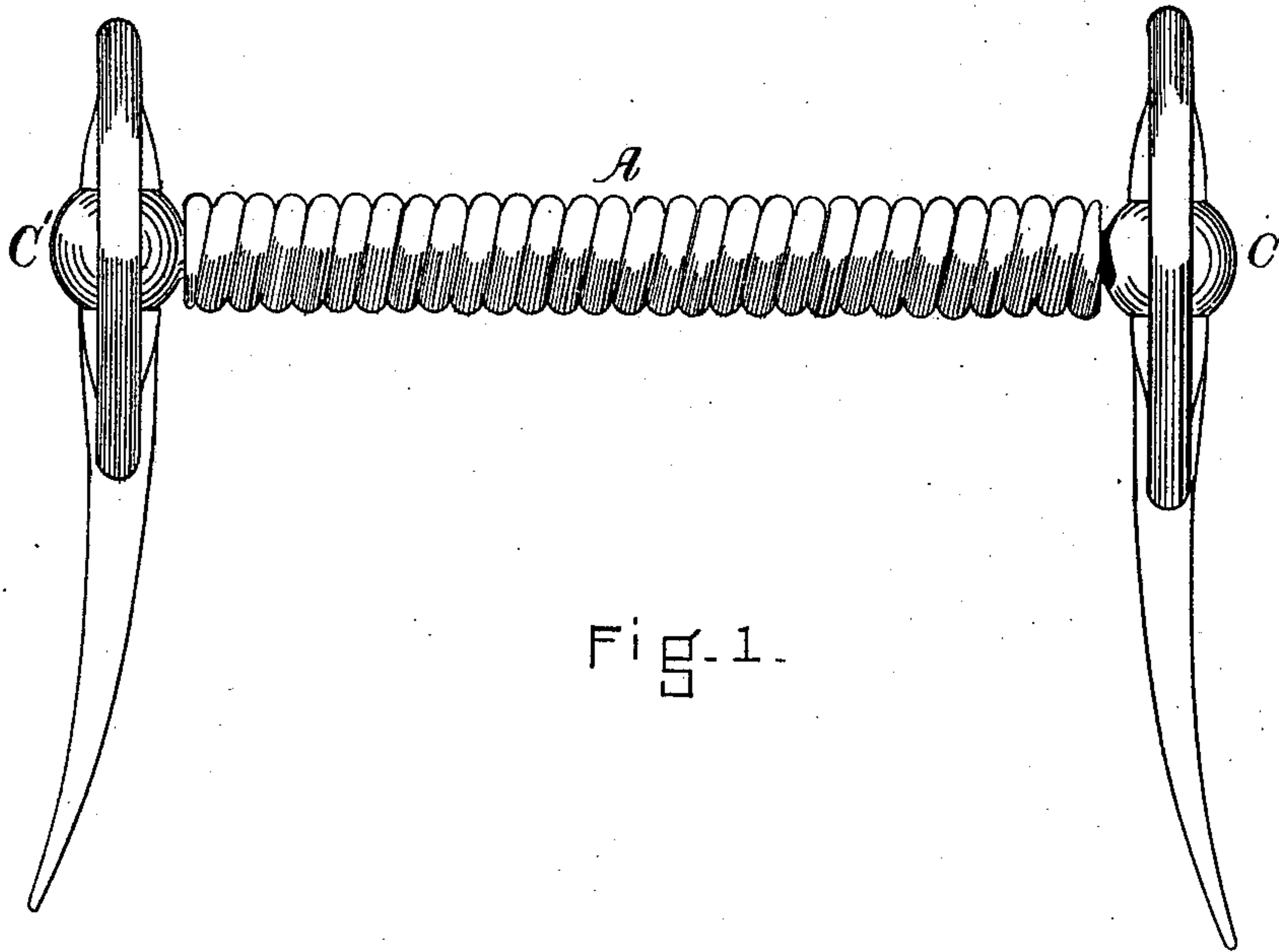


Fig. 1.

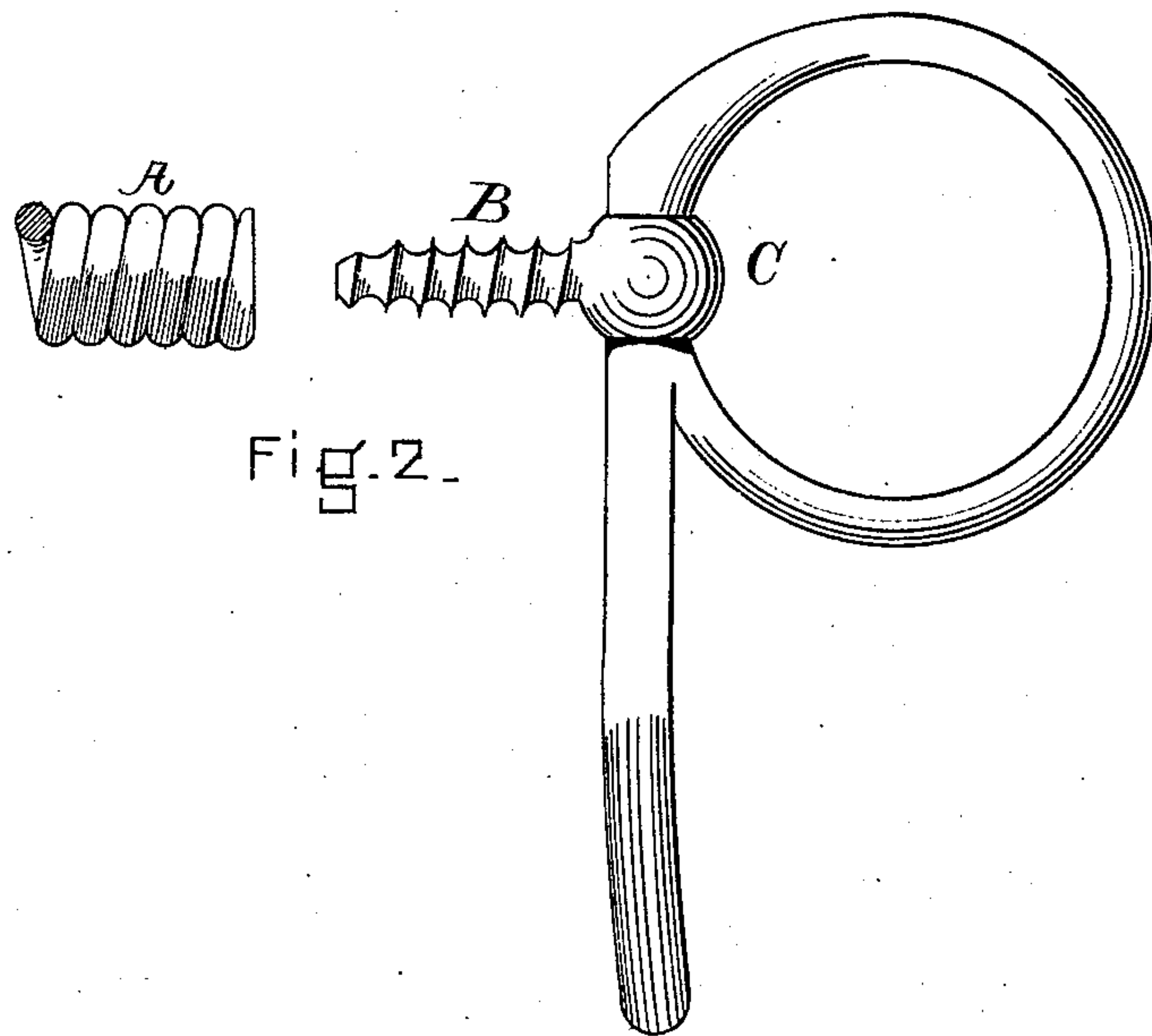


Fig. 2.

WITNESSES

Frank G. Parker.
O. S. Neale.

INVENTOR

John A. Fairbanks

UNITED STATES PATENT OFFICE

JOHN A. FAIRBANKS, OF CAMBRIDGE, MASS., ASSIGNOR TO THE FAIRBANKS
FLEXIBLE BIT MANUFACTURING COMPANY, OF HARTFORD, CONN.

BRIDLE-BIT.

SPECIFICATION forming part of Letters Patent No. 251,424, dated December 27, 1881.

Application filed February 16, 1880.

To all whom it may concern:

Be it known that I, JOHN A. FAIRBANKS, of Cambridge, in the county of Middlesex and State of Massachusetts, have invented a new and useful Bridle-Bit, of which the following is a specification.

My invention relates to that class of bits of which the mouth-piece consists of a helical spring.

10 My invention consists in a bridle-bit composed of a coiled-wire mouth-piece and suitable cheek-pieces united to the mouth-piece by means of screw-cut shanks and solder, all of which will be fully hereinafter explained in detail.

15 The invention is clearly illustrated in the accompanying drawings, in which Figure 1 is a view of my invention complete. Fig. 2 shows a part of the mouth-piece and one of the end pieces which serves to fasten the cheek piece or ring to the mouth-piece.

20 Let A represent the mouth-piece. This is made of coiled wire, as shown. The wire should be of sufficient size and hardness to resist all tendency to open or to receive a permanent "set" out of place, and yet to yield enough to give the mouth-piece a slight elasticity. This wire may be made of any suitable metal, and can be plated or covered, as desired. When 30 a wire is coiled, as shown, the inner surface of the helix thus made becomes an inside screw, and I take advantage of this fact by making a corresponding screw on the shank of the end

piece, as shown at B. To fasten the end piece B securely to the mouth-piece A, I coat either 35 the screw B or the inside of the coil A with some soldering metal or compound. Then when both parts are hot enough to melt the solder the screw-cut shank B is screwed into the coil A and the whole is allowed to cool. This 40 makes a firm and durable connection.

With this construction—that is, by using for the mouth-piece a coiled spring of sufficient strength to hold the cheek-piece without the use of any appliance or device within the coil 45 of the spring—I get, under all circumstances, the full use of the elasticity of the spring.

I am aware that bridle-bits have been made with a spring coiled around the mouth-piece, and I do not claim that. My claim is based 50 upon the use of the coiled wire as the entire mouth-piece, there being no other device for holding the cheek-pieces together, and in my method of uniting the said mouth-piece to the cheek-piece by means of the screw-cut shanks 55 and solder, as hereinbefore described.

What I claim as my invention is—

A bridle-bit composed of a coiled-wire mouth-piece and suitable cheek-pieces united to the mouth-piece by means of screw-cut shanks and 60 solder, substantially as set forth.

JOHN A. FAIRBANKS.

Witnesses:

OTIS S. NEALE,
WILLIAM EDSON.