## J. S. BINKLEY. BRIDLE.

(Application filed Aug. 20, 1900.) (No Model.) Fig.Z. Fig. 2. Hig. 3. INVENTOR WITNESSES:

## United States Patent Office.

## JOHN SILES BINKLEY, OF ATCHISON, KANSAS.

## BRIDLE.

SPECIFICATION forming part of Letters Patent No. 682,125, dated September 3, 1901.

Application filed August 20, 1900. Serial No. 27,456. (No model.)

To all whom it may concern:

Be it known that I, John Siles Binkley, a citizen of the United States, residing at Atchison, in the county of Atchison and State of Kansas, have invented certain new and useful Improvements in Bridle-Bits; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

improvements in bridle-bits, and especially to a bit which is so applied to the bridle that instead of a direct backward pull coming against the teeth and corners of the mouth of the animal when the reins are pulled upon an upward movement is imparted to the bit as the reinsare pulled upon, and so mounted that the bit will adjust itself readily to the mouth of the animal and enable the latter to be easily controlled without injury to the horse.

More especially, the invention consists in the provision of a bit the bridle-rings of which are split and carry each an antifriction-roller, under which straps are passed, which are connected at their upper forward ends to the bridle, while their other ends are designed to be connected to the reins, said straps adapted to work longitudinally against the antifriction-rollers as the reins are pulled upon in guiding the horse.

My invention will be hereinfter more fully described, and then specifically defined in the appended claim, and the invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which drawings—

Figure 1 is a view showing the bit applied to a bridle. Fig. 2 is an enlarged detail view showing the bit-rings in edge elevation. Fig. 3 is a sectional view through the ring and antifriction-wheel.

Reference now being had to the details of joint to the drawings by letter, A designates an or-

dinary bit, which in the present instance is a stiff or one-piece bit; but a joint-bit may be used if desired. At the ends of the bit are carried the bit-rings B B. Each ring has a split portion, forming a slot with parallel 55 walls CC, and between said walls is mounted an antifriction roller or wheel D, which is journaled on a pin E, the ends of which are held in apertures in said walls of the ring. At the locations where said walls merge 60 together the slot terminates in a curved wall C', and a strap F, which may be round, if desired, is passed through between said walls of the ring and underneath the antifriction roller or wheel. The ends of said 65 strap, there being a similar one passed through the ring at the other end of the bit, may be supplied with buckles Horother attachments, whereby the straps may be connected to the bridle and reins. One end of each strap F is 70 designed to be connected by means of a short strap to the bridle K, while the other end is connected to an end of the driving-rein.

From the foregoing it will be noted that instead of a direct backward pull being effected, 75 as in the common manner of attaching bits, when the rein is pulled on a bit constructed in accordance with my invention the bit is drawn upward and the corners of the mouth of the animal are not mutilated, as is frequently the case when the usual bits are employed.

Having thus described my invention, what I claim to be new, and desire to secure by Letters Patent, is—

A bridle comprising among its parts a mouthpiece having eyes at its ends, a ring slidingly engaged by said eyes, a slot extending longitudinally of the wall of said ring on one side thereof, an antifriction - roller 90 mounted across said slot, and a cheek-strap extended through said slot under said roller and having its free end attached to the bridle-rein.

In testimony whereof I affix my signature 95 in presence of two witnesses.

JOHN SILES BINKLEY.

Witnesses:

J. P. Adams, Chas. J. Conlon.