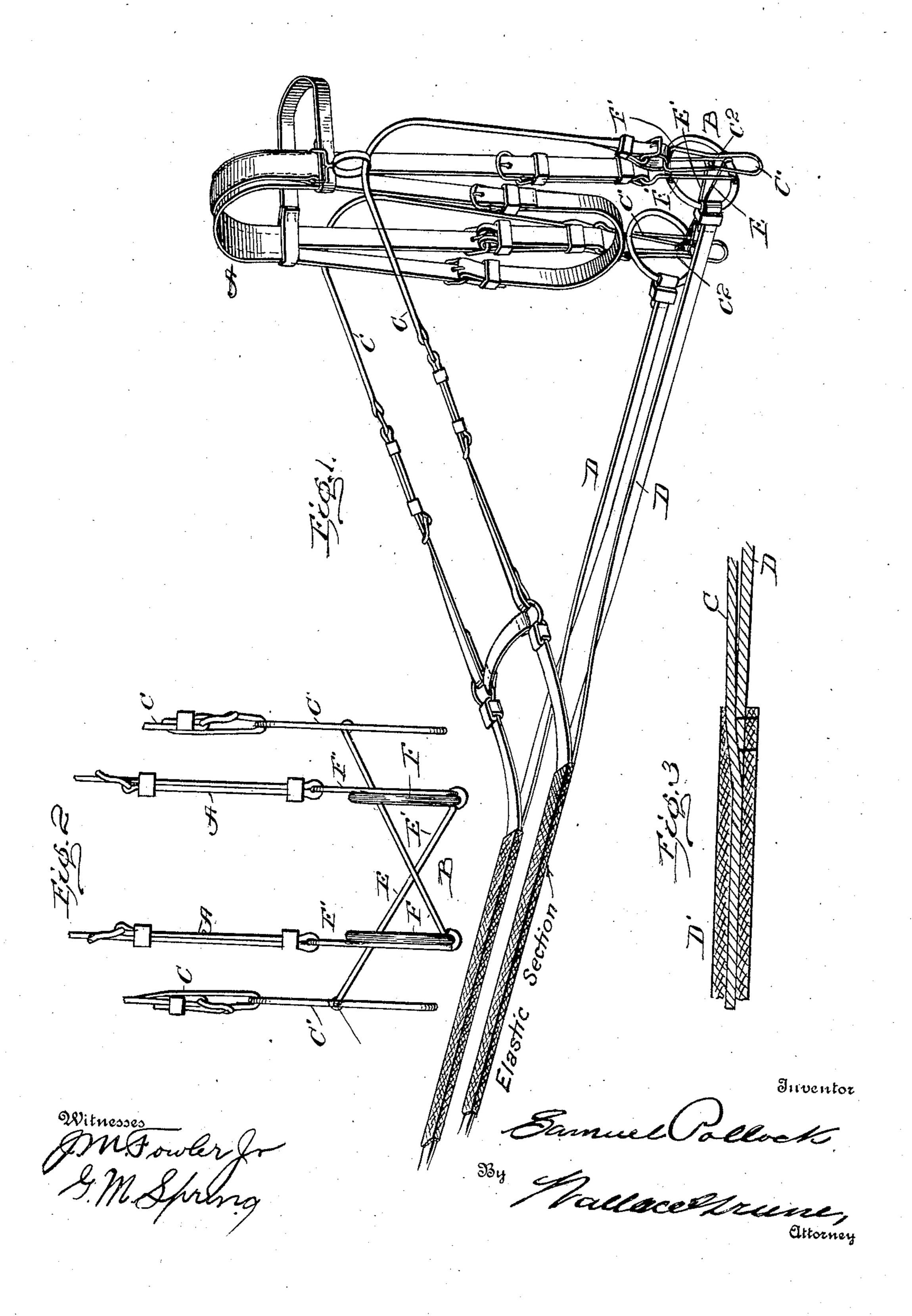
S. POLLOCK.
BRIDLE BIT AND ITS CONNECTIONS.
APPLICATION FILED JULY 10, 1905.



## UNITED STATES PATENT OFFICE.

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## BRIDLE-BIT AND ITS CONNECTIONS.

No. 827,818.

Specification of Letters Patent.

Patented Aug. 7, 1906.

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To all whom it may concern:

Be it known that I, Samuel Pollock, a citizen of the United States, residing in Brighton township, in the county of Wash-5 ington and State of Iowa, have invented new and useful Improvements in Bridle-Bits and Their Connections, of which the following is

a specification.

This invention relates to devices whereby 10 horses may be readily controlled by the bit and without the use of strength beyond that of any ordinary person. It involves the use of a bit that may be radically changed in its action by pulling upon overcheck-reins and 15 means whereby merely pulling strongly upon the reins while they are held in the usual way automatically changes the action of the bit.

In the accompanying drawings, Figure 1 is a perspective view of a bridle provided with 20 the novel bit to which novel reins are attached and arranged in a novel way. Fig. 2 shows in elevation a front view of the bit with the parts in position which they assume under a strong pull. Fig. 3 is a longitudinal 25 section through a portion of one of the reins.

In the drawings, A represents a bridle of common general form and construction; B, the bit; C, overcheck-reins, and D reins passing rearward from the bit in the usual man-

30 ner.

The bit consists of two rings or cheekpieces F, two normally contiguous parallel bars E E', and two links C'. Each ring has an approximately vertical way, shown in 35 this instance as formed by parallel bars F', extending across the rings. Each link C' lies normally flat against the outer side of the corresponding ring, with its central crossbar C<sup>2</sup> just above the lower side of the latter. One end of each bit-bar E E' is attached to the lower side of the corresponding cheekpiece, and its opposite end is pivotally connected to the cross-bar of the opposite link, the bit-bars passing between the bars F' and pre-45 vented from withdrawing by the link itself.

The reins D are attached to the cheekpieces and extend rearward to the hands of the rider or driver. That portion of each which is to be grasped is made tubular, com-50 pressible, and highly elastic in a longitudinal direction, being made, for example, of extensible fabric inclosing rubber. The overcheck-reins are attached to the upper ends.

of the links C', respectively, and carried up through ordinary runners, and thence 55 through the tubular portions of the reins D. Ordinarily the check-reins slide freely in the tubular sections just mentioned, the slight pressure of the hands being insufficient to compress the tubes, and as there is no pull up- 6c ward upon the links the bit-bars lie parallel and side by side in the mouth of the horse as if they constituted a simple straight bar. The slight pull exerted by the reins D upon the cheek-pieces in guiding the horse has no 65 tendency to separate the bit-bars, which thus cause the horse no discomfort whatever. If, however, the horse attempts to run away or for other reason needs restraint, the driver naturally pulls strongly upon the 70 reins and in so doing necessarily grips the tubular portions firmly. These portions are thus compressed upon the check-reins within, and the latter are thus firmly held, and since the tubular part in front of the hands is elas- 75 tic the pull upon the reins D is yielding, while that upon the check-reins is positive and much stronger. The consequence is that the free ends of the bit-bars are drawn up and the cheek-pieces are drawn inward, as shown 80 in Fig. 2. If the pull be strong, the bit is practically an instrument of torture, the effect of which varies directly with the pull, and hence the animal quickly ceases pulling or, in other words, stops. The instant the 85 pull ceases the parts automatically return to normal position, the bit becoming again the easiest or most comfortable form of bit.

What I claim is—

1. The combination with a rein having 90 that portion usually grasped by the driver highly elastic, of a second approximately inelastic rein having its corresponding portion secured alongside and in sliding contact with the portion first mentioned.

2. The combination with a bridle having near its upper part rein-guides approximately in the plane bisecting the angle of the jaws of the animal driven and provided with a bit adapted to torture when certain parts are 100 drawn upward toward said guides, of drivingreins extending directly rearward from the

tubular, elastic, and readily extensible and compressible, and approximately inelastic 105 emergency driving-reins extending upward

bit and having their hand-grasped portions

from the bit through said guides, respectively, and thence rearward and through the

tubular portions of the direct reins.

3. The combination with a rein having a compressible, tubular, longitudinally-elastic portion in position to be grasped by the hand of the driver or rider, of a second rein sliding in said portion and adapted to be firmly held

by the same when the latter is gripped strongly and thereby compressed.

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

SAMUEL POLLOCK.

Witnesses:

CARROLL DEEDS,
MYRTLE LA MOTTE.