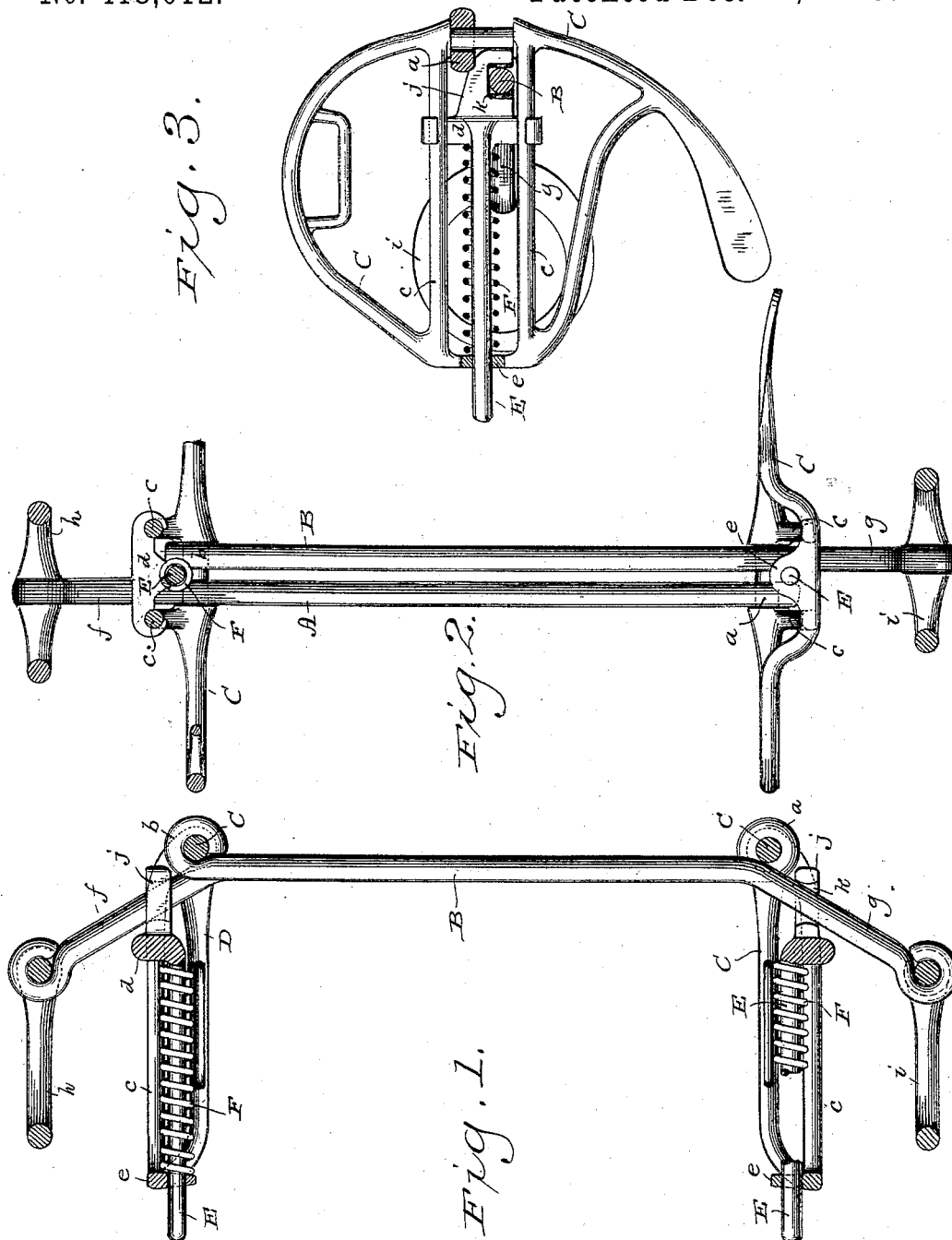


(No Model.)

C. E. GUY.
BRIDLE BIT.

No. 418,012.

Patented Dec. 24, 1889.



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES E. GUY, OF RACINE, WISCONSIN, ASSIGNOR OF ONE-HALF TO
WILLIAM P. BROWN, OF SAME PLACE.

BRIDLE-BIT.

SPECIFICATION forming part of Letters Patent No. 418,012, dated December 24, 1889.

Application filed August 19, 1889. Serial No. 321,228. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. GUY, of Racine, in the county of Racine, and in the State of Wisconsin, have invented certain
5 new and useful Improvements in Bridle-Bits; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to bridle-bits; and it consists in certain peculiarities of construction and combination of parts, to be hereinafter described with reference to the accompanying drawings, and subsequently claimed.

In the drawings, Figure 1 represents a vertical transverse section of a bit constructed
15 according to my invention; Fig. 2, a plan view of the same, partly in section; and Fig. 3, a side elevation, partly in section.

Referring by letter to the drawings, A B represent the parallel mouth-bars of a bridle-bit, and these bars are preferably straight for the greater portion of their length. The end
20 *a* of bar A is bent around or otherwise secured to a side ring C, and the opposite end *b* of bar B is likewise secured to another side ring
25 D, both of these side rings being provided with guides *c* for cross-heads *d* on rods E, that pass through lugs *e* on said side rings. Arranged on the rods E, between their cross-heads *d* and the lugs *e* on the side rings C D, are spiral springs F, designed to exert their force in
30 a forward direction, whereby said cross-heads are held against the opposite ends *f g* of the bars A B, these latter ends of said bars being preferably at an angle in order that a greater
35 leverage, and consequently quicker action, may be had against the resistance of the springs when said bars are drawn back by means of the bridle-rings *h i*, attached to their angular ends.

I prefer to provide the cross-heads *d* on the rods E with forward extensions *j*, having recesses *k* to engage the bars A B, as illustrated in Figs. 1 and 3, this construction preventing
40 loose play of said bars between the guides *c* for said cross-heads.

By the construction above described it will be readily seen that the pull of a horse on the bit will be against the bars A B, and the draw
50 of a driver on said bit will be against the resistance of the springs E, whereby no undue

strain comes upon the mouth of the animal when the latter is driven with a tight rein. Should it be necessary to curb the horse, an increased tension on the reins will overcome the resistance of the springs, and thus cause
55 the bars A B to draw hard upon the mouth of the animal and the side rings C D to clamp against the jaws of said animal; but as soon as the reins are slackened the expansion of said springs will cause the bit-bars and side
60 rings to approach to their normal positions.

A bit constructed according to my invention will be found of great service with high-spirited but tender-mouthed horses, as there need be no unnecessary strain upon the mouth
65 when driving with tight reins, while with hard-mouthed horses such a bit is equally serviceable, because the curbing-power is regulated by the springs and can be readily proportioned accordingly as the action and tem-
70 per of the animal requires.

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

1. A bridle-bit having the side rings thereof
75 provided with guides, spring-controlled rods having cross-heads arranged to work on the guides, and mouth-bars arranged to draw against the cross-heads, substantially as set forth.

2. A bridle-bit having the side rings thereof provided with guides, spring-controlled rods having cross-heads provided with forward extensions and arranged to work on the guides,
80 and mouth-bars engaging the extensions on the cross-heads of said rods, substantially as set forth.

3. A bridle-bit having the side rings thereof provided with guides, spring-controlled rods having cross-heads arranged to work on the
90 guides, and parallel mouth-bars, each of which has a straight portion secured to one side ring and an angular portion passed through the opposite side ring to draw against the cross-head of the spring-controlled rod on the
95 latter side ring, substantially as set forth.

4. A bridle-bit having the side rings thereof provided with guides, spring-controlled rods having cross-heads arranged to work on the guides and provided with forward extensions,
100

and parallel mouth-bars, each of which has a
straight portion secured to one side ring and
an angular portion passed through the exten-
sion of the cross-head of the spring-controlled
5 rod on the other side ring, substantially as set
forth.

In testimony that I claim the foregoing I

have hereunto set my hand, at Racine, in the
county of Racine and State of Wisconsin, in
the presence of two witnesses.

CHARLES E. GUY.

Witnesses:

GEORGE H. SMITH,
MICHAEL SHIEL.