(No Model.) 2 Sheets—Sheet 1.

C. DANNHAUER.

SAFETY REIN FOR HARNESS.

No. 372,362. Patented Nov. 1, 1887.

Fig. I.

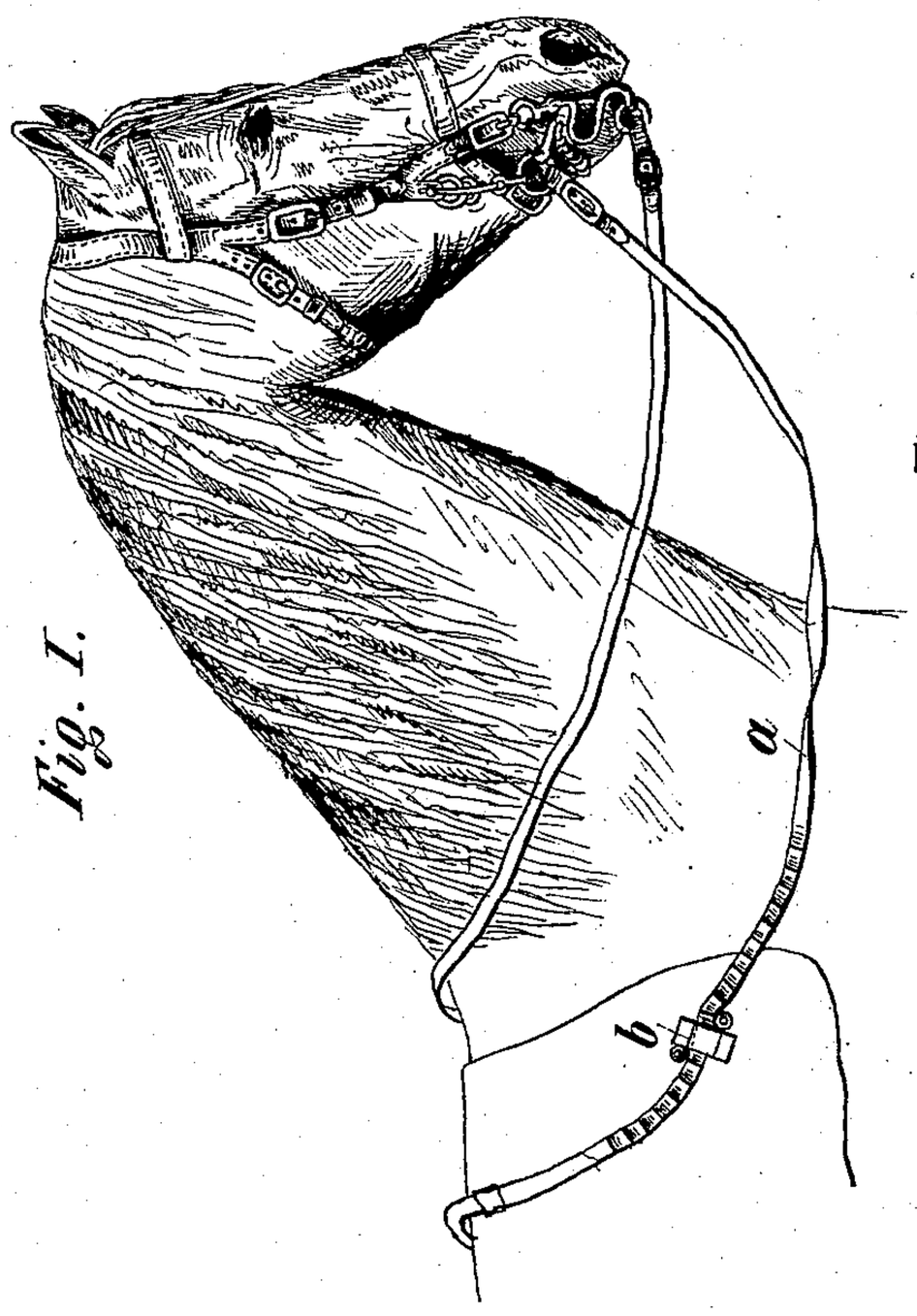


Fig. II.

Fig. III.

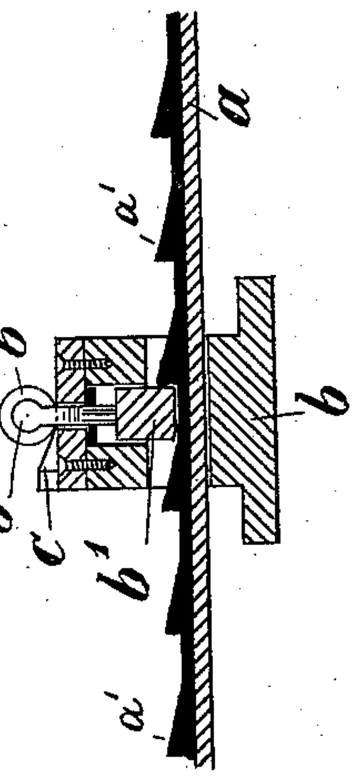
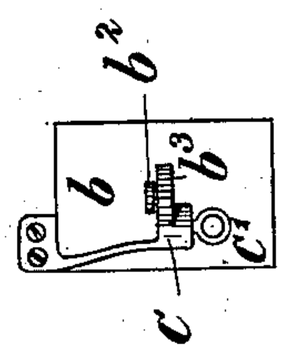


Fig. IV.



Witnesses:
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William Partington

Inventor:
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(No Model.) 2 Sheets—Sheet 2.

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Fig. V.

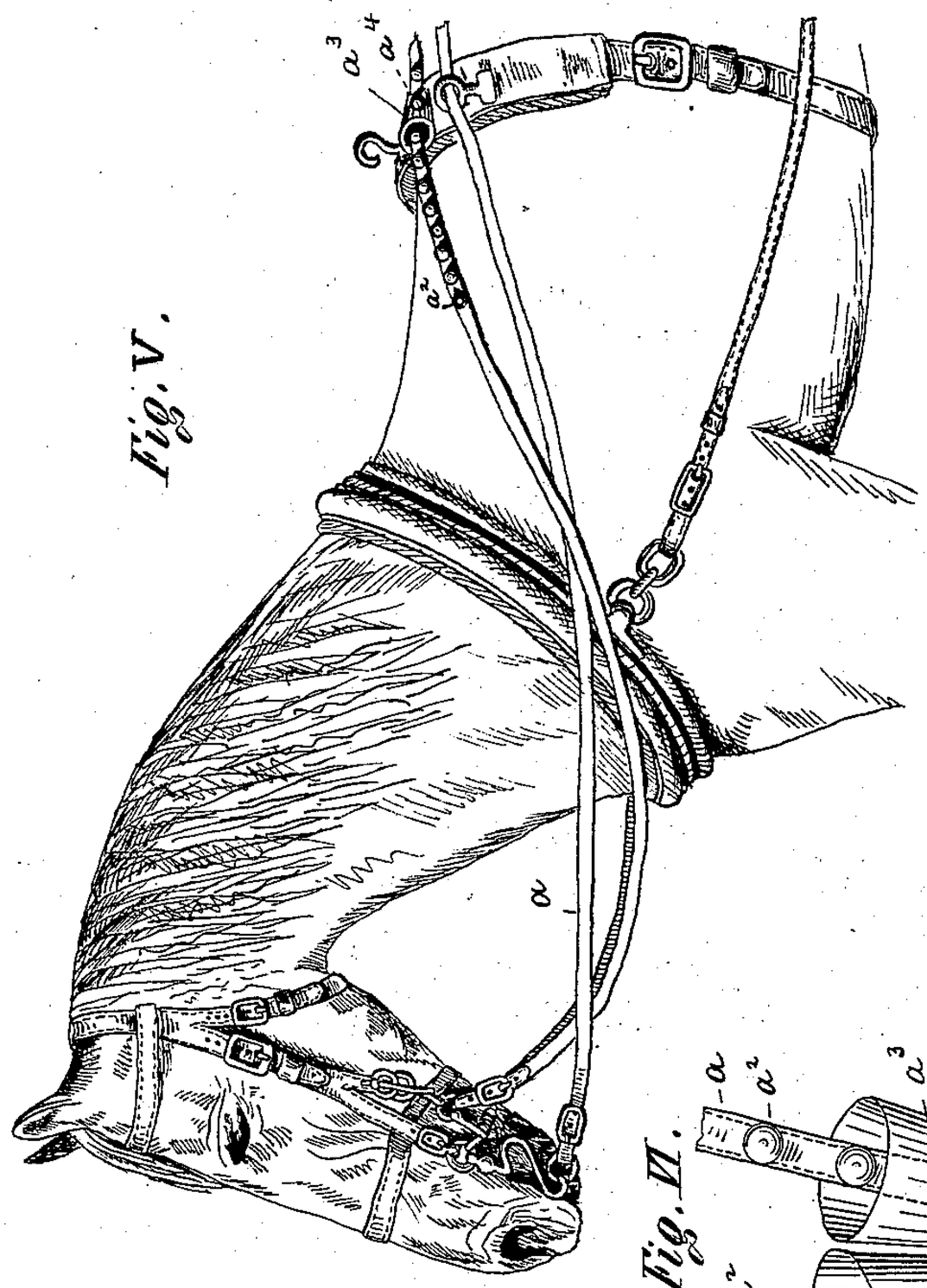
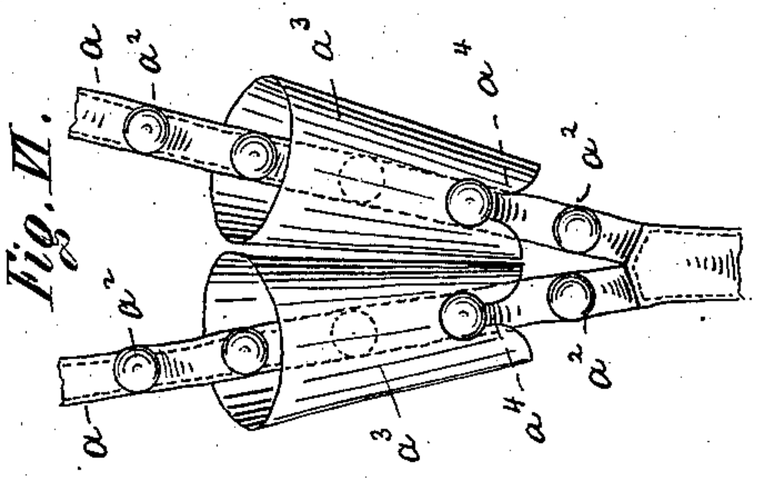


Fig. VI.



Witnesses:
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UNITED STATES PATENT OFFICE.

CONRAD DANNHAUER, OF AUGSBURG, BAVARIA, GERMANY.

SAFETY-REIN FOR HARNESS.

SPECIFICATION forming part of Letters Patent No. 372,362, dated November 1, 1887.

Application filed March 15, 1887. Serial No. 231,066. (No model.)

To all whom it may concern:

Be it known that I, CONRAD DANNHAUER, a citizen of Germany, residing at Augsburg, Bavaria, Empire of Germany, have invented a new and useful Improvement in Safety Reins and Lines for Horses, of which the following is a specification.

This invention relates to a safety-rein for runaway horses, by means of which the horse's head may be drawn toward its neck, and by which the head will be automatically held in that position. The rein is made to run through a locking device that will engage projections upon the rein and prevent the same from being drawn back without being previously released by the driver.

The invention consists in the various features of improvement, more fully pointed out in the claim.

In the accompanying drawings, Figure 1 shows my invention applied to a saddle-horse. Fig. 2 shows a detailed transverse section of the locking device. Fig. 3 is a detailed longitudinal section of the same. Fig. 4 is a detail top view of the same. Fig. 5 shows a modification of the invention applied to a carriage-horse. Fig. 6 is a detailed perspective view of the modification.

With particular reference to Figs. 1 to 4, the letter *a* represents the safety-rein, secured at one end to the bit-ring and passing at the other end through the locking device hereinafter described, which is secured to the saddle. One safety-rein is preferably applied to each side of the bit, and the two reins may be joined over the top of the saddle, as shown in Fig. 1, to be readily accessible to the rider or driver. The rein *a* is provided for some distance with a number of teeth, *a'*, which are preferably riveted to one of its sides. The locking device consists of a case, *b*, slotted for the reception of rein *a*, and provided with a spring-pawl, *b'*, adapted to engage the teeth *a'*. When the driver pulls the rein *a*, the pawl rides over teeth *a'* until the rein is released, when it will engage one of said teeth and prevent the horse from drawing the rein back. In order to raise the pawl *b'*, more especially for carriage-horses, it is provided on top of its shank b^2 with a roller or projection, b^3, that is engaged by a sliding conical spring-block, *c*, provided with an eye, *c'*, through which passes a line leading to the driver. On pulling this line the block *c* is pushed beneath projection b^3, and thus the pawl *b'* is raised out of engagement with teeth *a'*.

In Figs. 5 and 6 the reins *a* are provided with a number of buttons, a^2, and pass through two truncated conical tubes, a^3, having notched edges a^4, as shown. These edges engage the buttons a^2 when the reins are drawn toward the driver.

What I claim is—

The combination of a safety-rein having projections or serrations with a casing receiving said safety-rein and provided with a spring-pawl for automatically engaging said projections or serrations, substantially as specified.

CONRAD DANNHAUER.

Witnesses:

CHRIST BARTHCHUEP,

HANS NEGNER.