

(No Model.)

H. ELLSWORTH.  
SURCINGLE.

No. 460,746.

Patented Oct. 6, 1891.

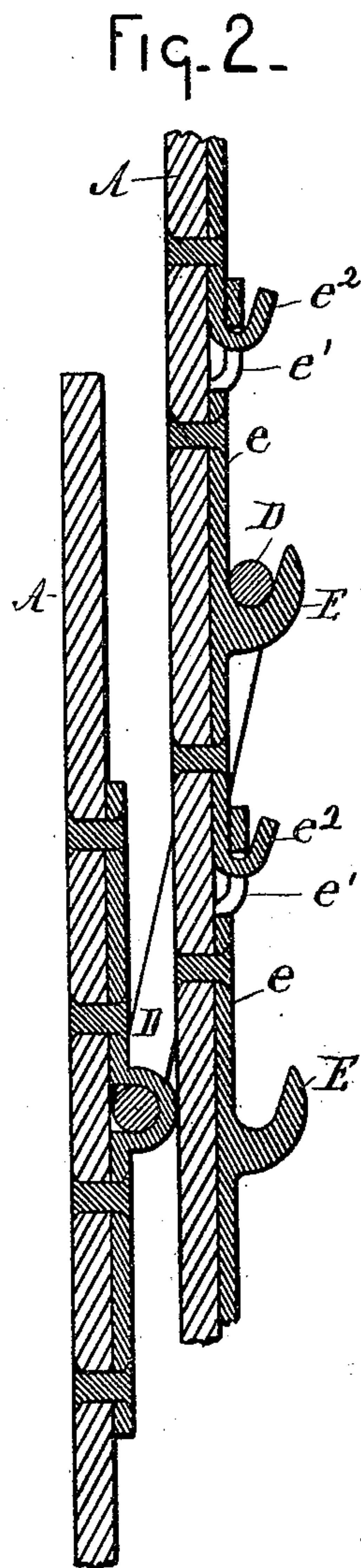
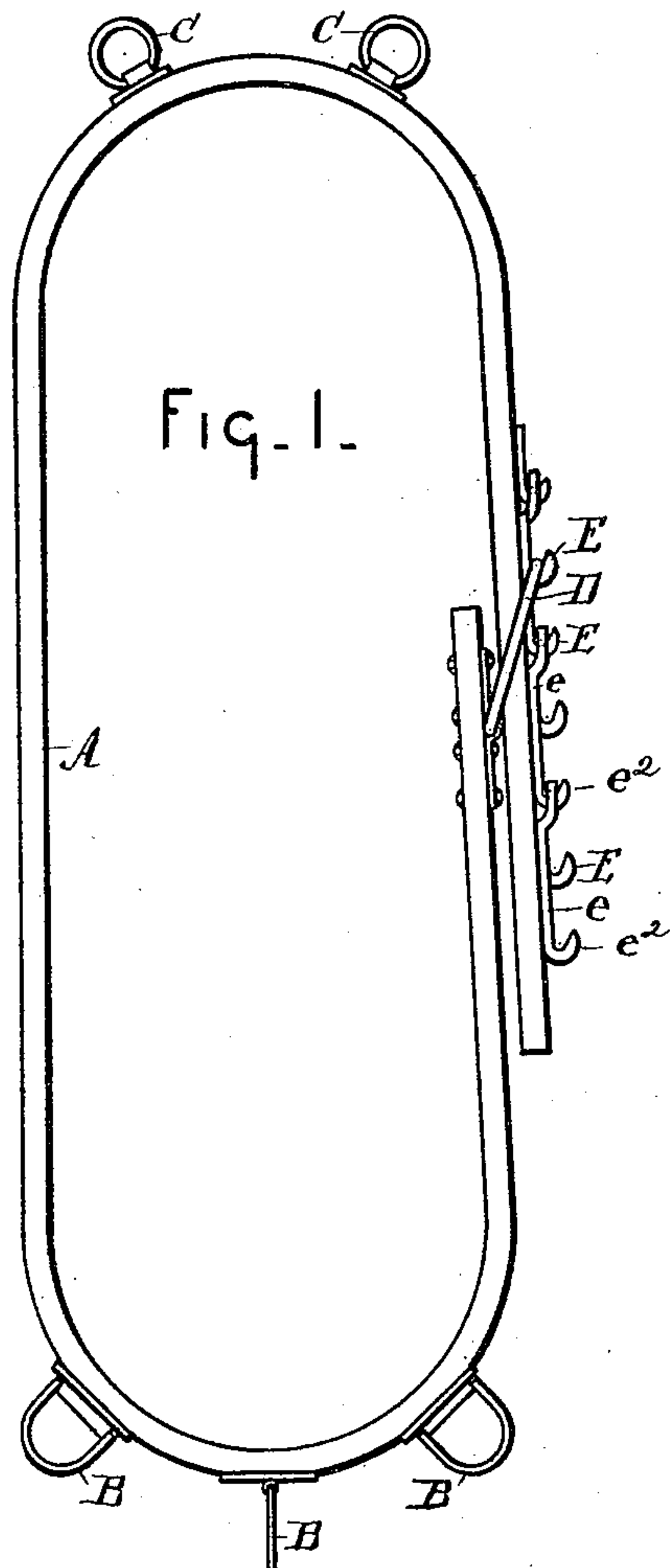
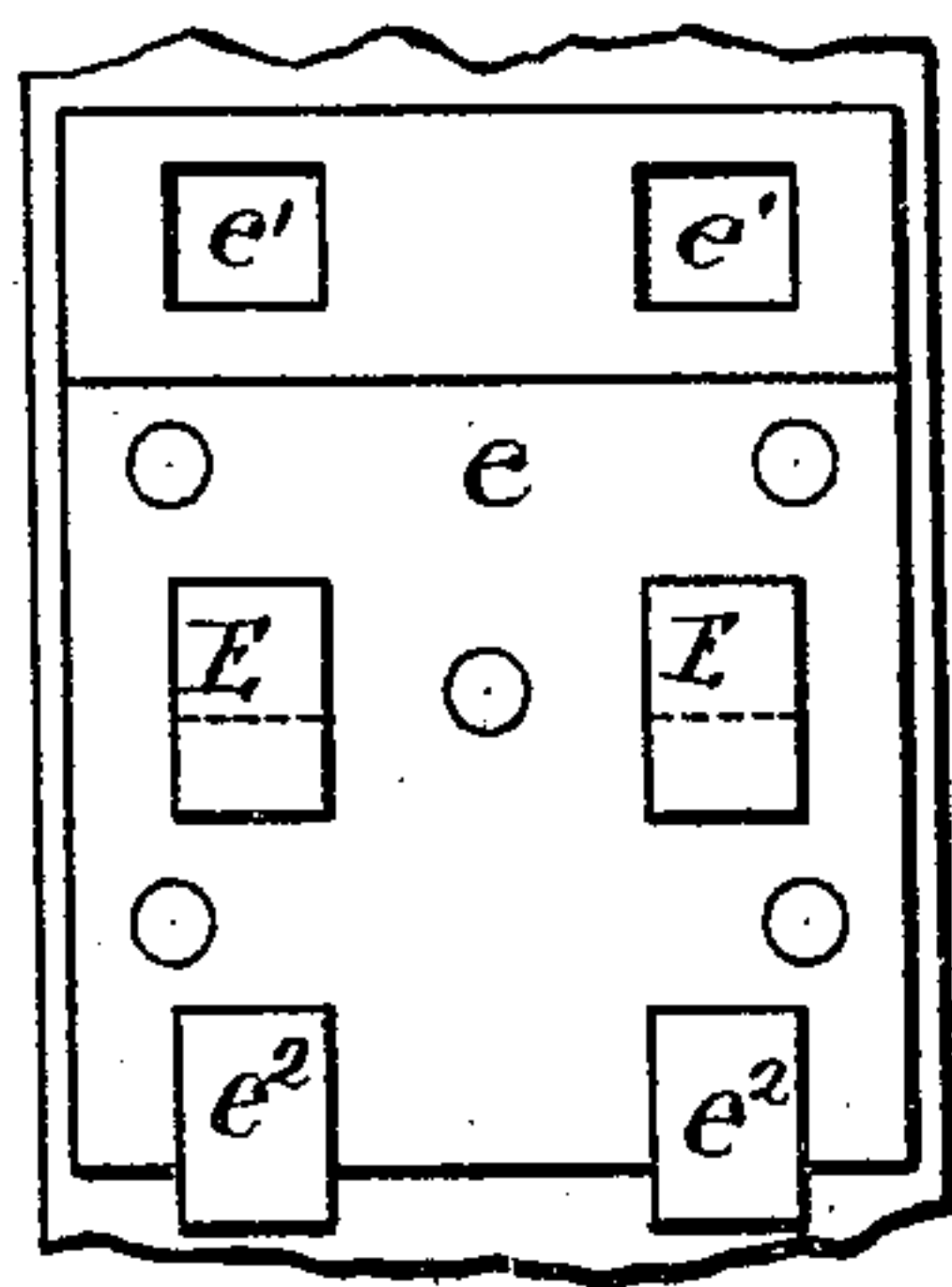


Fig. 3.



WITNESSES

*J. A. Rutherford*  
*Leroy B. Hills*

INVENTOR

*Henry Ellsworth*  
*By Wells H. Leggett & Co.*  
Attorneys.

# UNITED STATES PATENT OFFICE.

HENRY ELLSWORTH, OF STANDISH, MICHIGAN.

## SURCINGLE.

SPECIFICATION forming part of Letters Patent No. 460,746, dated October 6, 1891.

Application filed September 13, 1890. Serial No. 364,883. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY ELLSWORTH, a citizen of the United States, residing at Standish, county of Arenac, State of Michigan, have invented a certain new and useful Improvement in Surcingles; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

In the drawings, Figure 1 is a general view of the surcingle embodying my invention. Fig. 2 is a longitudinal section of a portion of the same, showing the construction of the fastening apparatus. Fig. 3 is a front elevation.

In the training of horses or in the handling of horses when it is desired to perform surgical operations upon them it is customary to employ a surcingle about the body of the horse. This is usually provided with rings above the back for lines or other fixtures, and also with rings beneath the body of the horse through which throwing-straps or other similar appliances may be passed. It is also of the greatest importance that this surcingle should be exceedingly strong, in order that it shall not yield or give way under any emergency, and that the surcingle should be smooth upon the interior and provided with means for loosening or tightening the same, which shall be perfectly secure against any liability of breaking or tearing out.

It is the purpose of my invention to produce a surcingle specially adapted for this purpose. To this end A is a strong strap. B represents rings fastened to the outer surface of the strap on the portion which in use is beneath the body of the horse, and C represents rings conveniently located on that portion above the body of the horse. D represents a strong metallic loop secured to one end of the surcingle in lieu of a buckle. E represents a series of metallic hooks. These hooks are connected with plates *e*, which are strongly riveted to the strap, and each plate is provided with eyes *e'*, through which hooks *e*<sup>2</sup> project to engage each plate with the adja-

cent one and permit them all to flex easily with the strap, constituting, as it were, a metallic chain fastened to the exterior surface of the strap. The hooks E serve the same purpose as the tongue serves in the ordinary buckle, and the construction avoids wholly the use of such a tongue.

It is apparent that this construction strengthens very greatly the surcingle, because where an ordinary buckle is employed with the tongue of the buckle passing through the strap the whole strain of the surcingle comes upon the said tongue. The tongue is therefore liable to be bent or broken, and it is also liable to tear through the strap at this point and so permit the surcingle to yield just at an inopportune moment when sudden strain is thrown upon it.

All of these attachments to the strap are so made as to leave a small margin *a* of the strap extending beyond the sides of the said attachments, so that under no circumstance can the said attachments come into contact with the body of the horse to injure it.

These hook-plates may be made of wrought metal or of malleable iron, brass, or equivalent metal, or the plate *e* may be made of wrought or malleable metal with suitable orifices for the reception of wrought or malleable hooks E riveted therein, which construction might facilitate repair of a broken hook.

What I claim is—

1. A surcingle consisting of a strap or band A, provided with sets of rings B and C and having on the outside of one end and narrower than the strap a metallic plate with a metallic loop D pivoted thereto and on the outside of the other end and narrower than the strap a series of rigidly-attached metallic plates lying on the surface of the strap and each provided with a projecting hook E, substantially as described.

2. A surcingle consisting of the strap or band A, provided with rings B and C, a rigid metallic plate secured to the outside of the strap or band at one end thereof and provided with a pivoted metallic loop D, and a series of rigid metallic plates *e*, secured to the outside of the strap or band at the opposite end thereof and each provided with a project-



ing hook E and an orifice or recess  $e'$ , through  
which passes a hook  $e^2$  on the extremity of an  
adjacent plate, said hooked plates and the  
portion of the strap to which they are attached  
5 being adapted to pass through the pivoted  
metallic loop, all substantially as shown and  
described.

In testimony whereof I sign this specifica-  
tion in the presence of two witnesses.

HENRY ELLSWORTH.

Witnesses:

C. J. SHIPLEY,  
M. A. REEVE.