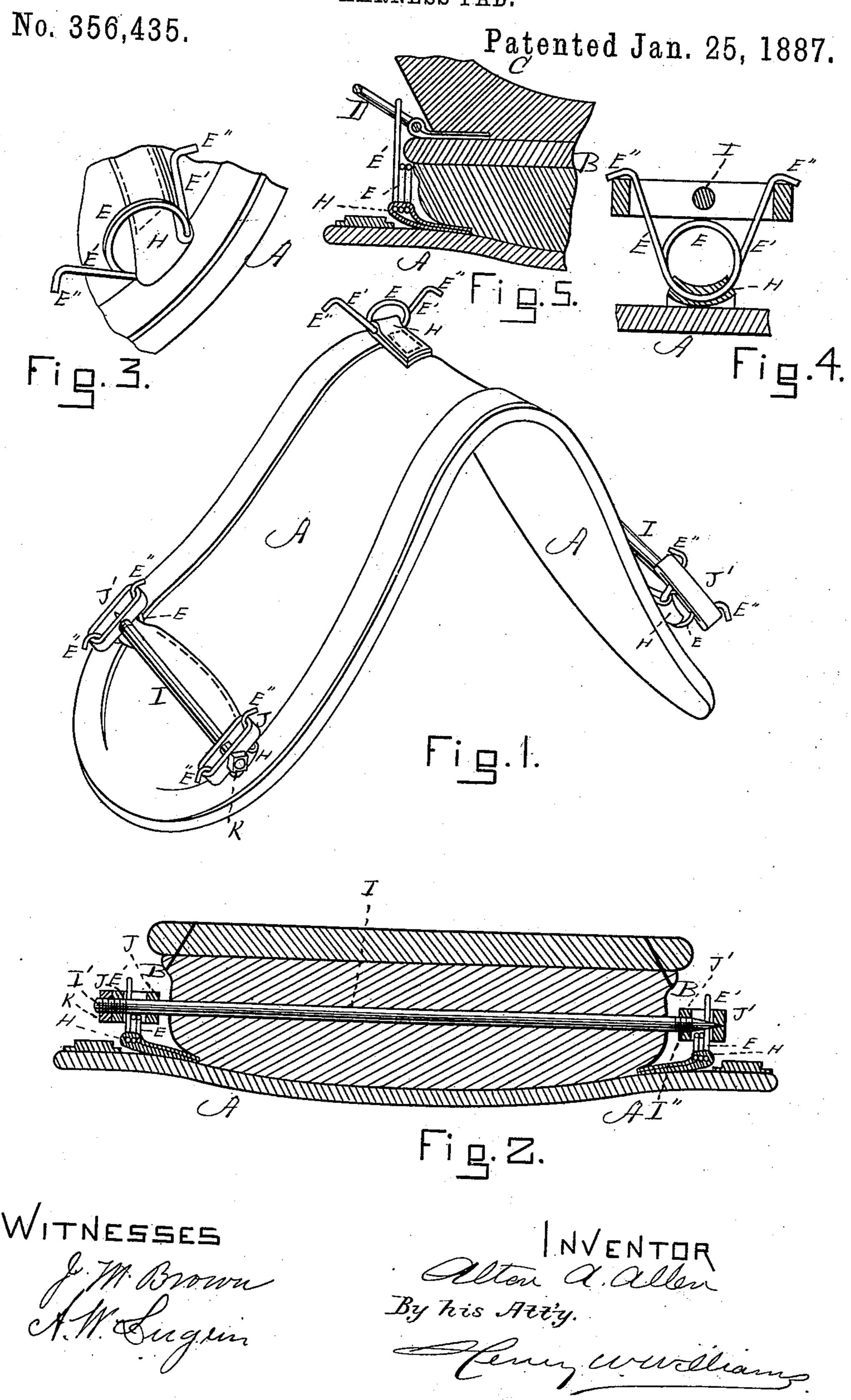
A. A. ALLEN.

HARNESS PAD.



UNITED STATES PATENT OFFICE.

ALTON A. ALLEN, OF FALL RIVER, MASSACHUSETTS.

HARNESS-PAD.

SPECIFICATION forming part of Letters Patent No. 356,435, dated January 25, 1887.

Application filed June 23, 1886. Serial No. 205,963. (No model.)

To all whom it may concern:

Be it known that I, ALTON A. ALLEN, of Fall River, in the county of Bristol and State of Massachusetts, have invented new and use-5 ful Improvements in Harness-Pads, of which the following is a specification.

This invention relates particularly to the means whereby the pad and the saddle are se-

cured together.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is a view in perspective of a padembodying my invention. Fig. 2 is an enlarged transverse vertical section of the same and the 15 saddle at one of the points at which they are secured together. Figs. 3 and 4 are respectively perspective and sectional detailed views. Fig. 5 is a central cross vertical section.

A represents the pad, and B the saddle, 20 constructed as usual, except as below described.

C is the base for the check-hook, provided

with the ordinary ring, D.

E E are springs, five in number, placed in the positions shown—i. e., two near one end 25 of the pad and on opposite sides thereof, and two near the other end of the pad, also opposite each other, and one centrally placed near the rear edge of the pad. Each spring consists of one or more central coils, with the ends 3c normally extending outward, say, at an angle of forty-five degrees, and at the extreme ends bent outward at an angle of about ninety degrees. The coils are lettered E, the straight portions E', and the extreme ends E". The 35 springs are secured to the pad by loops H, passing through the coils E.

II are long needles, two in number, each of which is provided at one end with a thread, I', and at the other end with a thread, I", and a point. A loop, J, is slipped onto the needle 40 and pushed up toward its blunt end, being prevented from slipping off by the nut K. The needle is then thrust through the saddle B, as seen in Fig. 2, and another loop, J', threaded for the purpose, placed upon the 45 thread I" next its pointed end. The loops J and J' are then slipped over the springs E E' E", which are contracted for the purpose, and held, as seen in Figs. 1 and 4, and thus the saddle and pad are secured together. The 50 loop D, extending from the base C, supporting the check-hook, is similarly secured to the central spring, E E' E".

Having thus fully described my invention, what I claim, and desire to secure by Letters 55

Patent, is—

1. The combination of the springs E E' E", secured to the pad, with the keys consisting of the loops JJ' and needle I, the latter thrust horizontally through the saddle, substantially 60 as and for the purpose set forth.

2. The combination of the springs E E' E", secured centrally to the rear edge of the pad, with the ring D, secured to the base holding the check hook, substantially as and for the 65

purpose described.

ALTON A. ALLEN.

Witnesses: CHARLES C. SMITH, R. N. ALLEN.