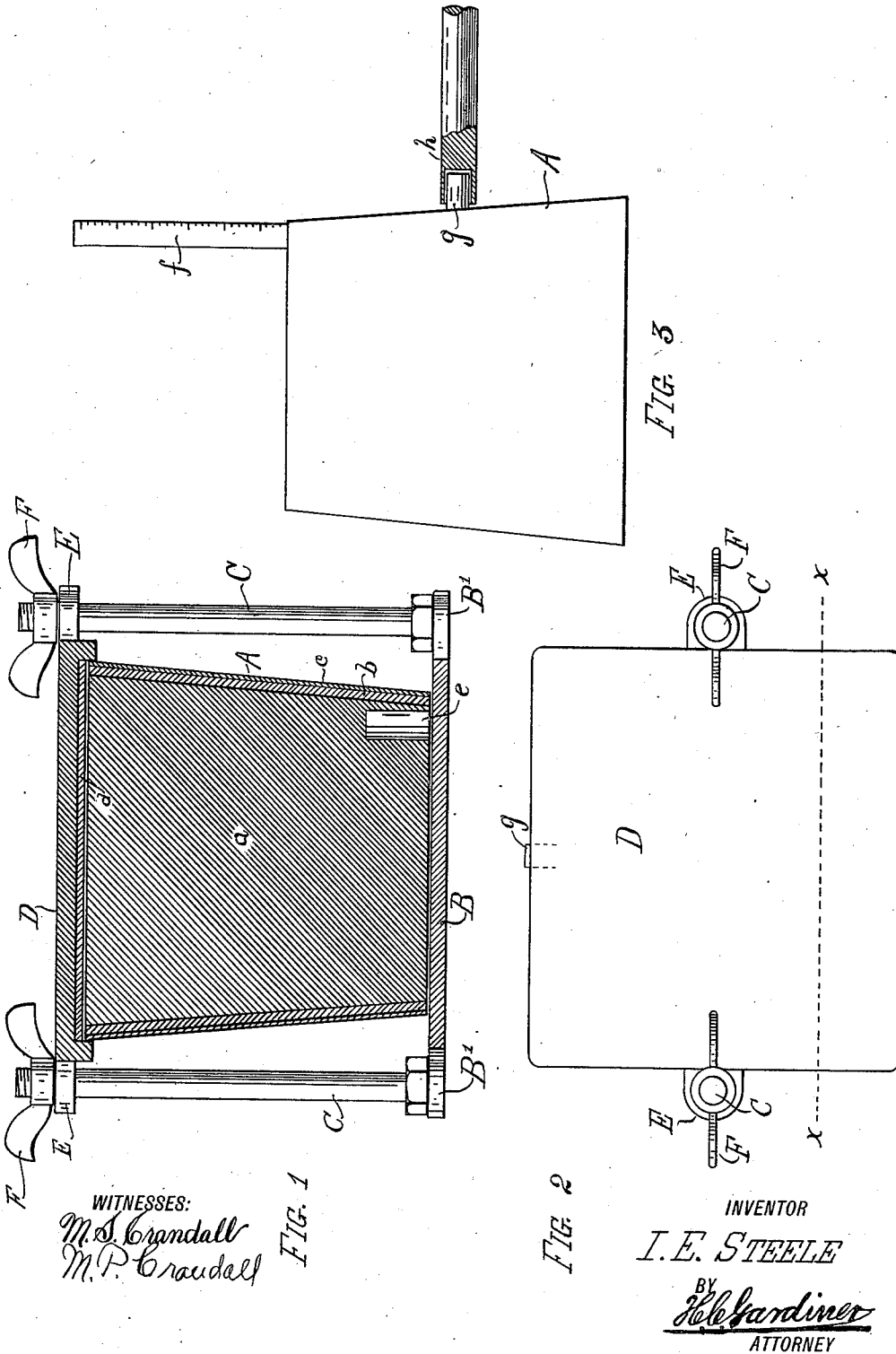


I. E. STEELE.
VULCANIZER.
APPLICATION FILED OCT. 20, 1911.

1,043,167.

Patented Nov. 5, 1912.



WITNESSES:
M. S. Grandall
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FIG. 1

FIG. 2

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IRA E. STEELE, OF HARTLEY, IOWA.

VULCANIZER.

1,043,167.

Specification of Letters Patent.

Patented Nov. 5, 1912.

Application filed October 20, 1911. Serial No. 655,688.

To all whom it may concern:

Be it known that I, IRA E. STEELE, a citizen of the United States, and a resident of Hartley, in the county of O'Brien and State of Iowa, have invented certain new and useful Improvements in Vulcanizers, of which the following is a specification.

My invention relates to means for vulcanizing or hardening rubber and the object of the invention is primarily the provision of a simple and inexpensive instrument by which the rubber tires of automobiles and other vehicles employing pneumatic tires may be easily and speedily repaired. As is well known two pieces of india rubber or caoutchouc are merged together by the application of heat under pressure which is called vulcanizing.

The invention consists of the device here shown and described and in the arrangement and combination of parts, as will be pointed out in the claim.

I have illustrated my invention in the accompanying drawing in which—

Figure 1 is a cross-section on line *x—x*, Fig. 2. Fig. 2 is a plan view and Fig. 3 is a view in side elevation of the vulcanizer inverted for heating, a part of the handle being shown in section.

In the drawing A is the vulcanizer proper consisting of the solid metal head *a*, shaped like a truncated cone and composed preferably of iron or steel, the inclosing layer of asbestos *b* and the outer metal sheet *c*. The layer of asbestos and the outer sheet retain the heat in the head. The larger end of the head is provided with a covering *d* secured thereto and adapted to protect the edges of the asbestos and outer rim. In the smaller end of the head near the rim a round opening *e* is provided for the insertion of a thermometer *f* which indicates the temperature when placed over a flame. A lug *g* is secured to one side of the head to

which a handle *h* is attached for lifting the head.

In operation the head is placed over a flame or other source of heat, in the manner shown in Fig. 3, until the right temperature is obtained when the thermometer is removed and the head inverted and laid upon the rubber which has been previously placed upon the metal frame B. The latter is provided on each side with an upright bolt C secured to ears B' extending out from the frame. A metal covering D having extending ears E with round central openings for the bolts is then placed over the head and screwed firmly down by the finger nuts F. When the vulcanization is complete the cover is taken off and the head removed.

As this device is small and compact, the means for heating are simple and all may be easily carried in the tool chest of a motor car.

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

The combination with a solid head, an adjustable handle secured thereto, a layer of asbestos inclosing the head, a metal rim inclosing the asbestos, the whole being shaped in the form of a truncated cone, of a frame B in which the head is adjusted during the vulcanizing process having ears B' projecting from the frame, upright bolts C secured to said ears, a cover D with ears E for adjustment to said bolts and nuts F adjustable to said bolts for securing the cover upon the head.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses.

IRA E. STEELE.

Witnesses:

HENRY MILLER,
ALMA LINK.