

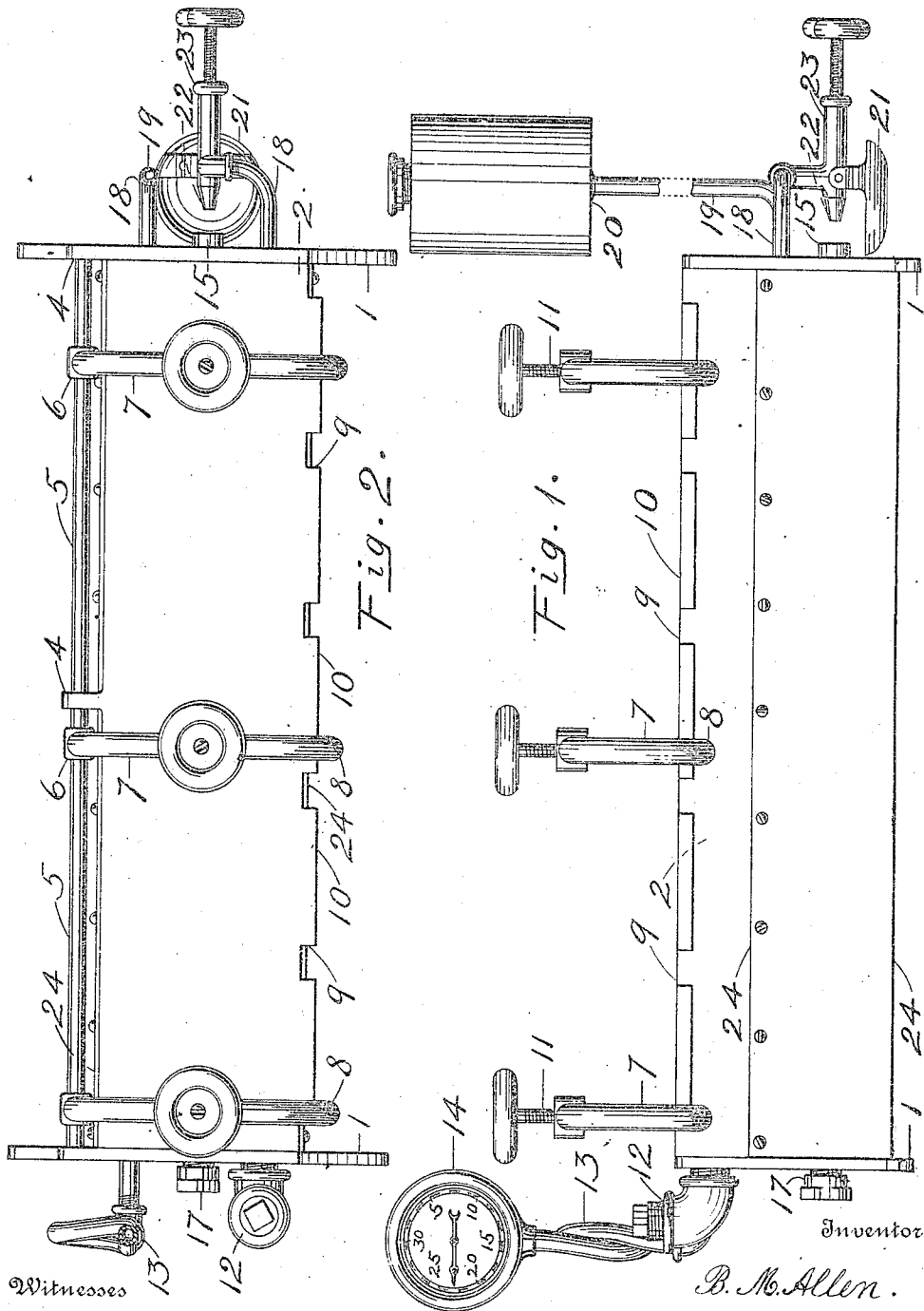
B. M. ALLEN.
VULCANIZER.

APPLICATION FILED SEPT. 28, 1911.

Patented Apr. 22, 1913.

2 SHEETS—SHEET 1.

1,059,587.



Witnesses

Chas. G. Lynch.
H. H. Parsons

By Harry Ellis Chawalee

Attorney

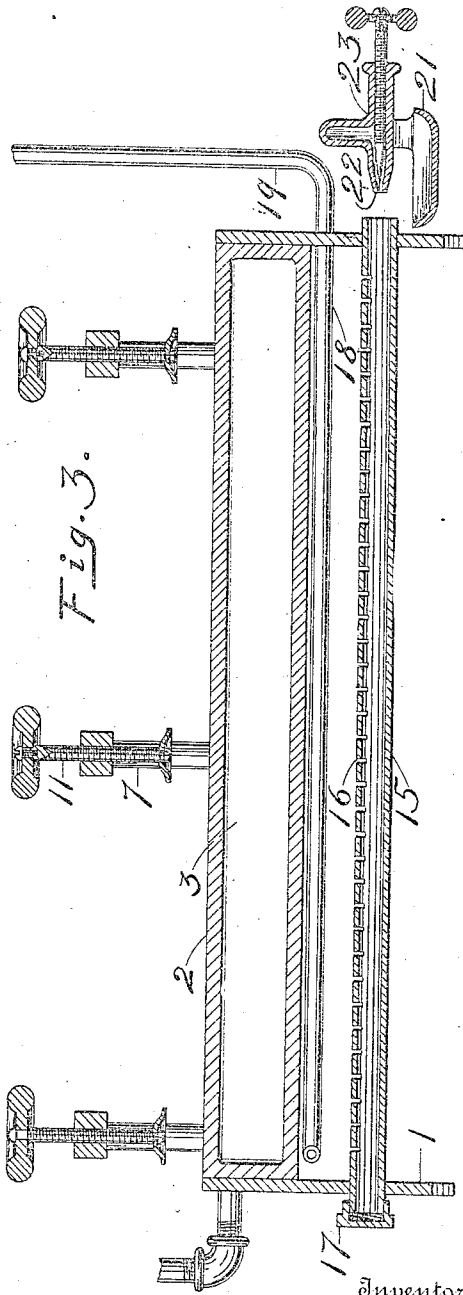
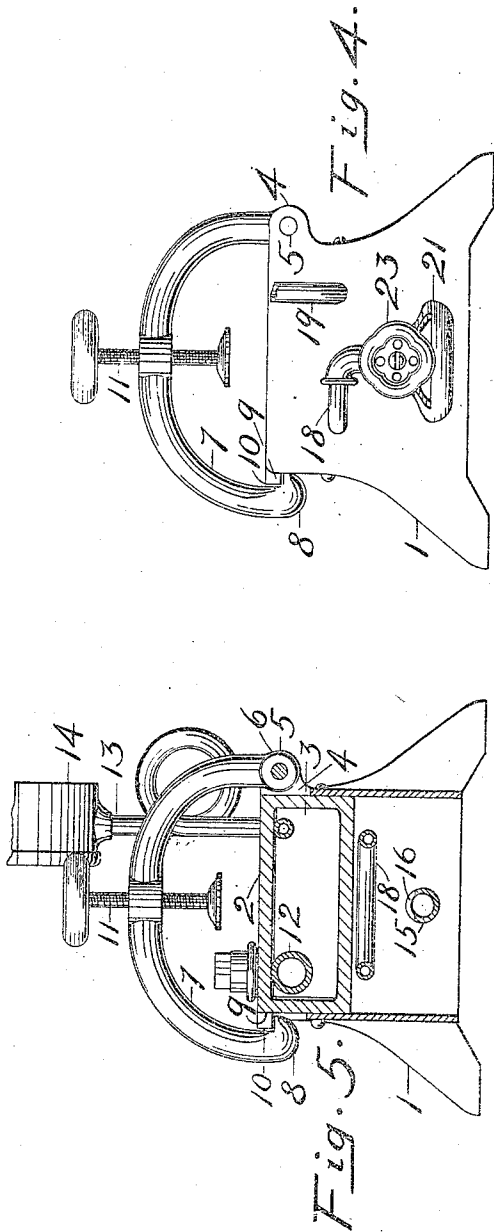
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Witnesses

Chas. L. Lynck.
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Attorney

UNITED STATES PATENT OFFICE.

BERTRAM M. ALLEN, OF DES MOINES, IOWA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO
DIAMOND MANUFACTURING COMPANY, OF POLK COUNTY, IOWA.

VULCANIZER.

1,059,587.

Specification of Letters Patent.

Patented Apr. 22, 1913.

Application filed September 28, 1911. Serial No. 651,332.

To all whom it may concern:

Be it known that I, BERTRAM M. ALLEN, a citizen of the United States, residing at Des Moines, in the county of Polk and State of Iowa, have invented certain new and useful Improvements in Vulcanizers, of which the following is a specification.

My invention relates to improvements in vulcanizers, and has for its leading object the provision of an improved steam vulcanizing apparatus.

The further object of my invention is the provision of simple and efficient means for producing the correct heat for vulcanizing in a vulcanizing table, which will thoroughly and evenly heat the same without the necessity of other bulky attachments.

Another object of my invention is the provision of improved simple and compact vulcanizing mechanism which may be readily carried from place to place and at all times be ready for operation.

Other objects and advantages of my improved vulcanizer will be readily apparent by reference to the following description taken in connection with the accompanying drawings and it will be understood that I may make any modifications in the specific structure shown and described within the scope of my claim without departing from or exceeding the spirit of my invention.

Figure 1 represents a side elevation of my complete vulcanizer. Fig. 2 represents a top plan view thereof. Fig. 3 represents a longitudinal sectional view of the device. Fig. 4 represents an end view of the same, and Fig. 5 represents a cross sectional view.

In the drawings, the numeral 1 designates the standards or ends which are bolted to the ends of the rectangular casting 2 forming the vulcanizing table of my device, said casting being hollow to provide the central chamber 3 adapted to contain the steam for heating the upper surface of the vulcanizing table. The casting is formed at one side with the ears 4 through which pass the rod 5 on which are slidably and rotatably engaged the collar portions 6 of the clamp yokes 7. Said yokes have hooked portions 8 adapted to pass downward through the slots 9 formed in the flange or rib 10 projecting from the opposite side of the casting from the ears 4. When swung downward the yokes are slid longitudinally of the rod 5 until the hooks 8 firmly engage the under

face of the rib 10. Screw clamp members 11 are carried by the central portion of the yokes for clamping the article to be vulcanized on the table.

The chamber 3 is adapted to contain water for generation into steam to cause the casting to serve both as a boiler and also as a vulcanizing table. Projecting from the casting and in communication with the chamber is a pipe 12 for the introduction of water, while also projecting from the casting is a pipe 13 bearing a steam gage 14 for indicating the pressure in the chamber 3.

To heat the under portion of the casting and generate steam therein, I connect the standards 1 by the pipe 15 having upwardly directed apertures 16 for the exit of gas, said pipe being closed at one end by the cap 17 and having the other end open. A coil 18 is secured against the bottom of the casting 2 and has one end 19 extending upward to the fuel tank 20 and has the other end depending to the drip or starting cup 21 disposed beneath the nozzle 22 in communication with the pipe and controlled by the valve member 23. To cause all of the heat of the burner pipe 15 to be directed against the casting and the coil 18, I secure to the sides of the casting the depending shield members 24 which extend nearly to the bottom of the standards 1. In the use of my improved vulcanizer, I first allow gasoline from the tank 20 to drip into the cup 21 and light the same to heat the nozzle 22 and generate gas in the nozzle. Gas having been generated, I open the valve 23 to allow the vapor to be discharged into the pipe 15 and light the jets at the various apertures 16. These jets then heat the coil 18 and continue the generation of vapor from the gasoline and also heat the under portion of the casting and the chamber 3 to produce the steam for vulcanization of an article held on the top or table portion of the casting 2.

From the foregoing description taken in connection with the accompanying drawings, the construction and operation of my improved steam vulcanizer will be readily apparent, and it will be seen that I have provided a simple and compact vulcanizer which dispenses with other exterior steam connections and which while capable of ready transportation will be complete in itself and can be started operating at any time and on account of the small size of the

chamber 3 and consequently the small amount of water to be turned into steam will use but very little fuel in producing the desired heat for vulcanizing.

5 I claim:

The combination with a pair of standards, of a casting supported thereby having an inclosed chamber, said chamber being adapted to contain water, a burner pipe supported by the standards beneath the casting, a fuel coil
10 supported by the standards above and at the

sides of the burner pipe, a nozzle discharging into the burner pipe from the coil, and means for regulating the discharge from the nozzle.

In testimony whereof I affix my signature, in the presence of two witnesses.

BERTRAM M. ALLEN.

Witnesses:

K. C. HOWE,
AGNES HANNON.