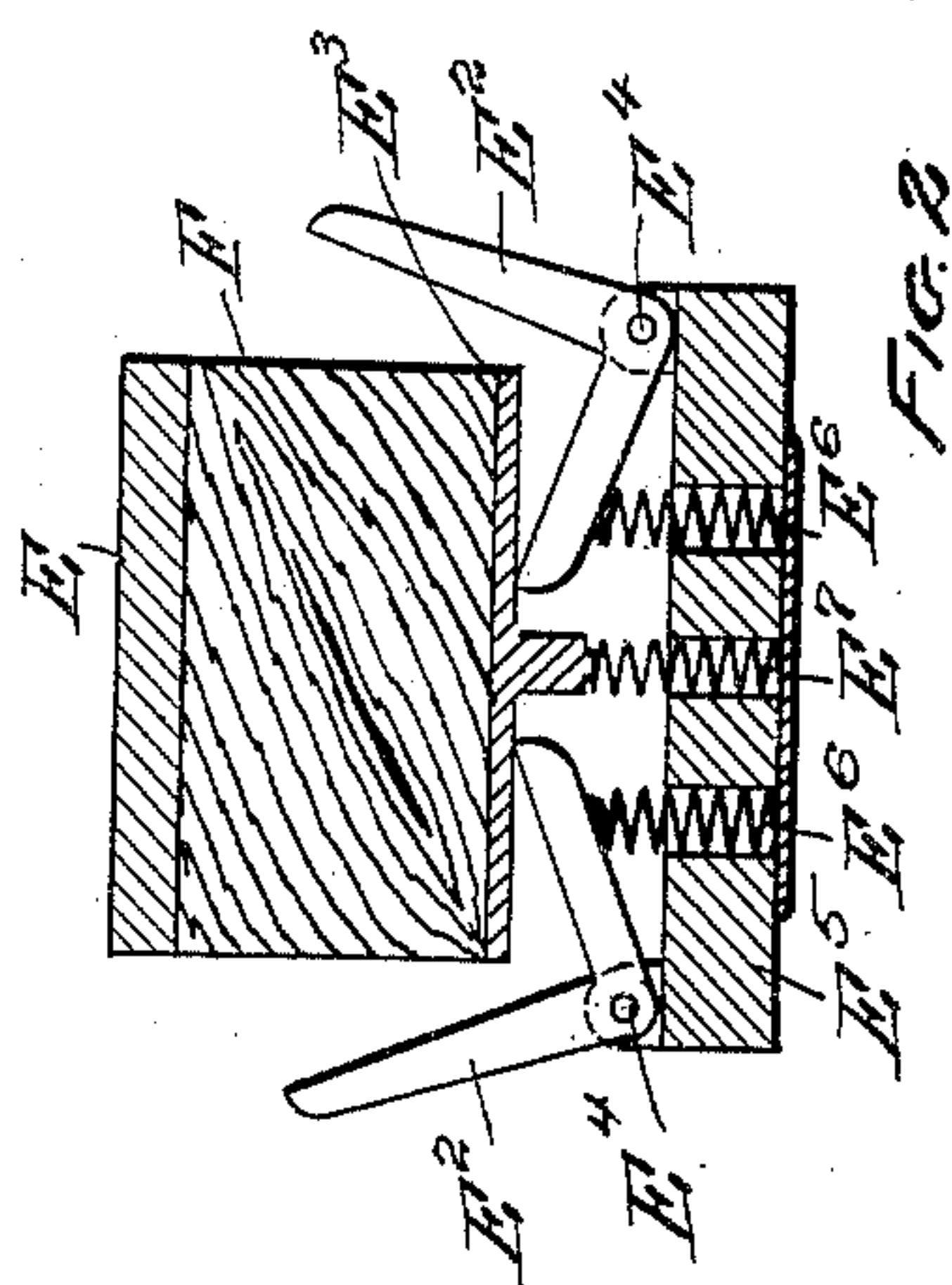
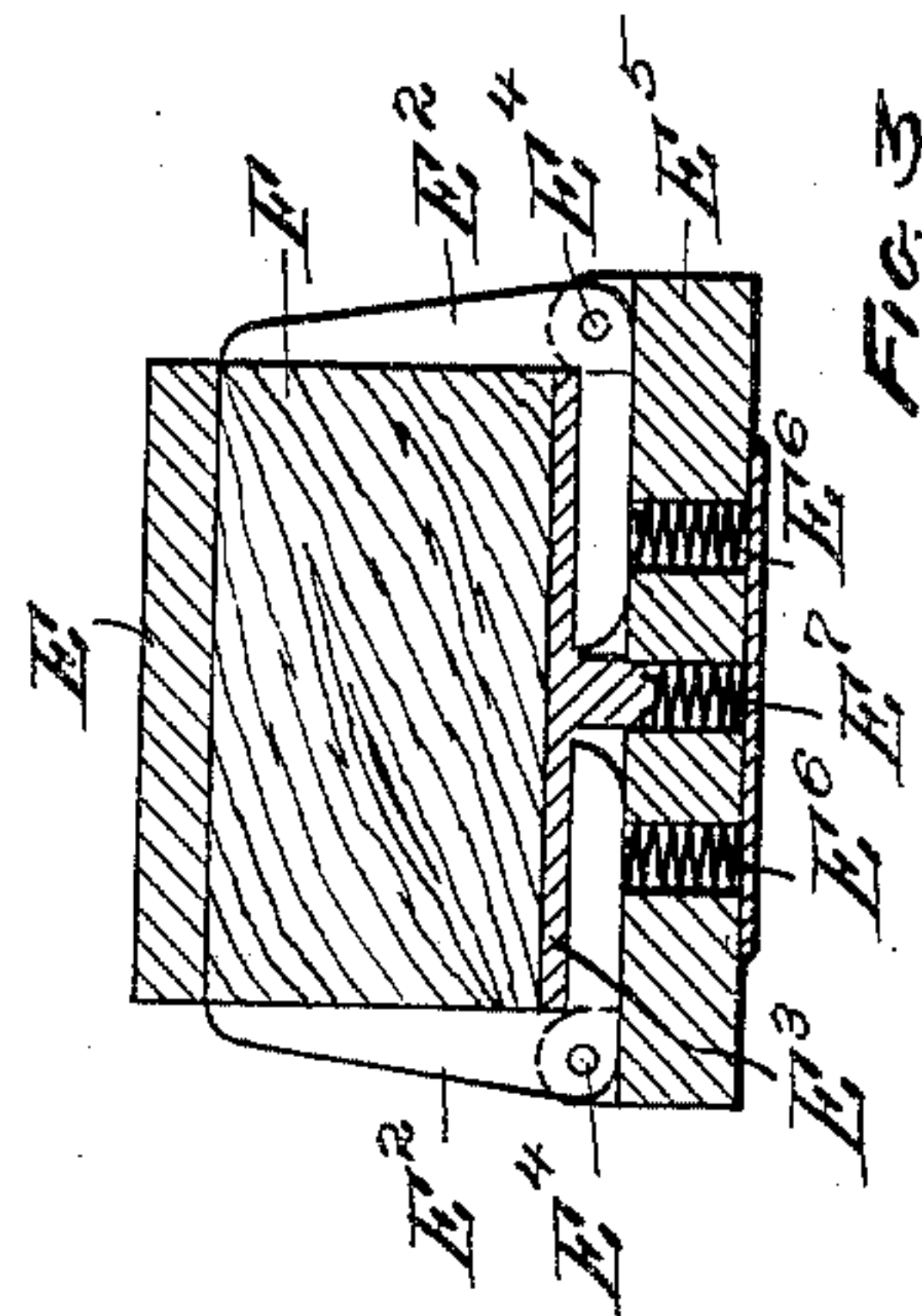


920,396.

Patented May 4, 1909.



INVENTOR
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UNITED STATES PATENT OFFICE.

HENRY JOHN SCHEID, OF NEW RICHMOND, OHIO, ASSIGNOR TO INTERNATIONAL COMPRESSED PRESERVING WOOD PROCESS COMPANY, OF CINCINNATI, OHIO, A CORPORATION OF OHIO.

MACHINE FOR COMPRESSING WOOD.

No. 920,398.

Specification of Letters Patent.

Patented May 4, 1909.

Application filed October 17, 1908. Serial No. 458,212.

To all whom it may concern:

Be it known that I, HENRY JOHN SCHEID, a citizen of the United States of America, and resident of New Richmond, in the county of Clermont and State of Ohio, (post-office address Fifth and Race streets, in the city of Cincinnati, county of Hamilton, and State of Ohio,) have invented an Improvement in Machines for Compressing Wood; and I do hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

My invention relates to machines for compressing wood, and it has for its object the improvement in the construction of such devices, whereby they are simplified and rendered more efficient in action.

The novelty of my invention consists in the combination and sub-combination of the parts as will be hereinafter set forth and specifically pointed out in the claim.

In the drawings Figure 1 is a side elevation of my invention. Fig. 2 is a section on line 2, 2 of Fig. 1. Fig. 3 is a section on line 3, 3 of Fig. 1.

In the drawing, A is the base, B the cap, C the bolts that hold the base and cap together. In the base are three hydraulic plungers D. D. which act on the plates E. E². E³ compressing the wood tie F. On each end of the base B are traveling chains G, which pass over the sprocket wheels H. This endless chain is used to feed the wooden tie after it is placed between the plates E. E². E³ into the press. Any suitable means of power can be utilized for operating the chains. The plates E² are pivoted at E⁴ and made in the form of a bell crank so that when pressure is placed on plate E³ which rests on one side of the bell crank plates E² the plates E² will clamp the sides of the tie preventing bulging of the wood when pressure is applied. The springs E⁶, E⁶, E⁷ cause the side plates E² to back away from the side of the tie when pressure is removed.

The following is a clear description of my process. The wood is handled in a cold nat-

ural state and under no circumstances do I first either use steam or heat the wood to be treated, nor heat the press, or any attachment of the same. I first take the wood in its natural green state, the greener the better it works. The wood is placed between two iron plates of suitable dimensions, from about four feet and upward in length according to the purpose for which it is to be used. The wood is placed in my machine cold in a horizontal position, pressure is applied at three or more places lengthwise, as shown in the drawing. This pressure eradicates the sap. The application of pressure at the same time in at least three places is absolutely necessary, because it would be a mechanical impossibility to properly press pieces of wood as long as railroad ties, and get the same pressure over the entire surface. After years of experimenting, I have found that the amount of pressure necessary to properly treat the wood depends upon the kind of wood used. It is important that the pressure be so regulated that it is not great enough to destroy the fiber of the wood. The wood should be reduced to the shrinkage line, and held until cold, under pressure blocks, between plates until the wood gets set and will not spring back when dry. I then give the wood a treatment to be covered by another patent. The last step consists in passing the wood treated as above stated through a process, which makes the wood impervious to water, mold, rot and prevents chipping, also burning by fire when hot coals fall from engines, or otherwise.

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

A machine for compressing wood, a compressor, plates for receiving the wood, angle plates pivoted at the right angle point, springs beneath the right angle plates, all substantially as described.

HENRY JOHN SCHEID.

Witnesses:

S. B. BURWELL,
G. WINKELMAN.