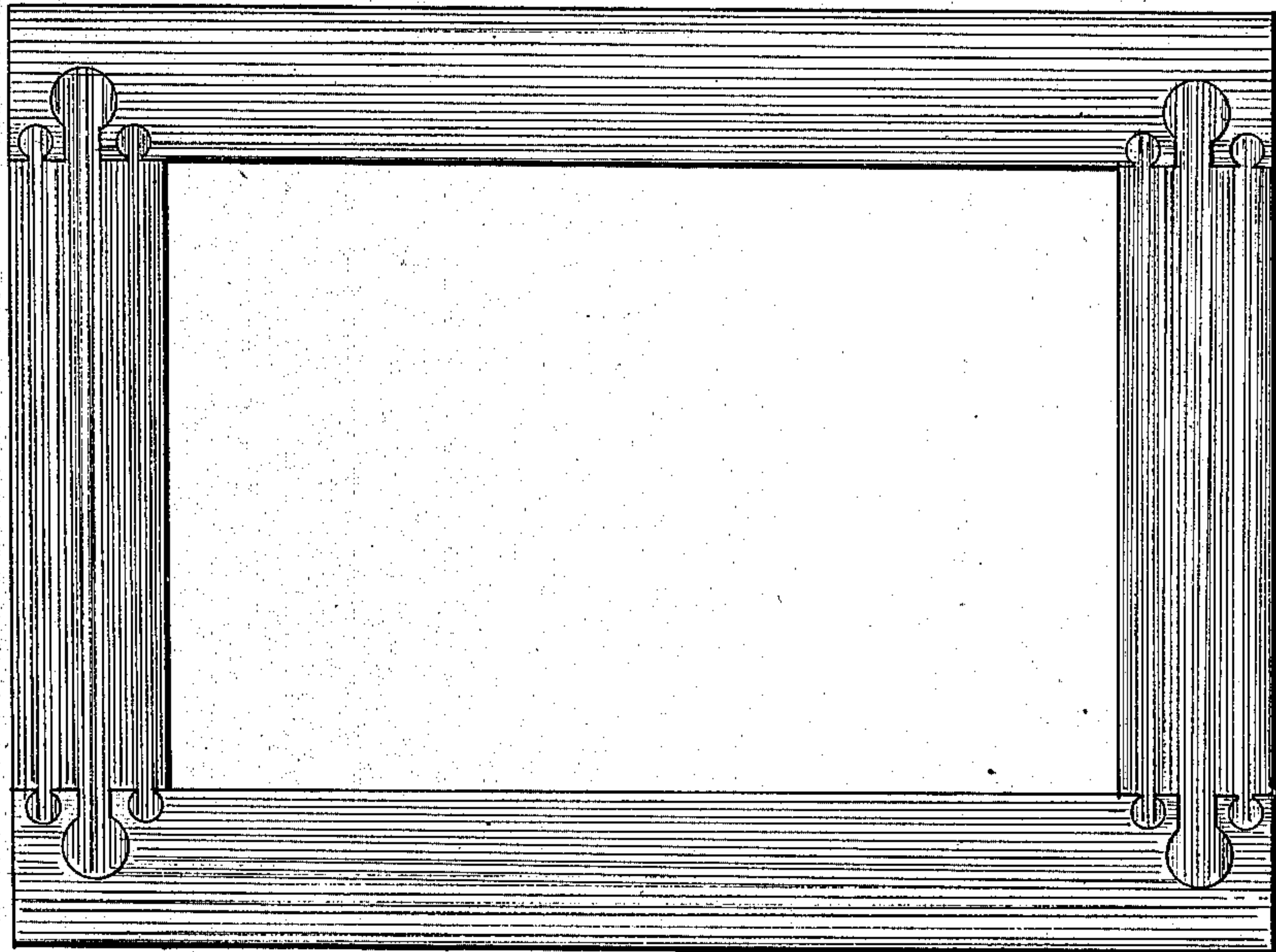


Sheet 1.
PATENTED AUG 2 1870

M.C. Gardner

Steam Packing.

105934



Witnesses:

A. G. Wilson

J. Emory Jones.

Inventor:

M. C. Gardner

M.C. Gardner.

Punch For
Making Gasket.

Fig 1

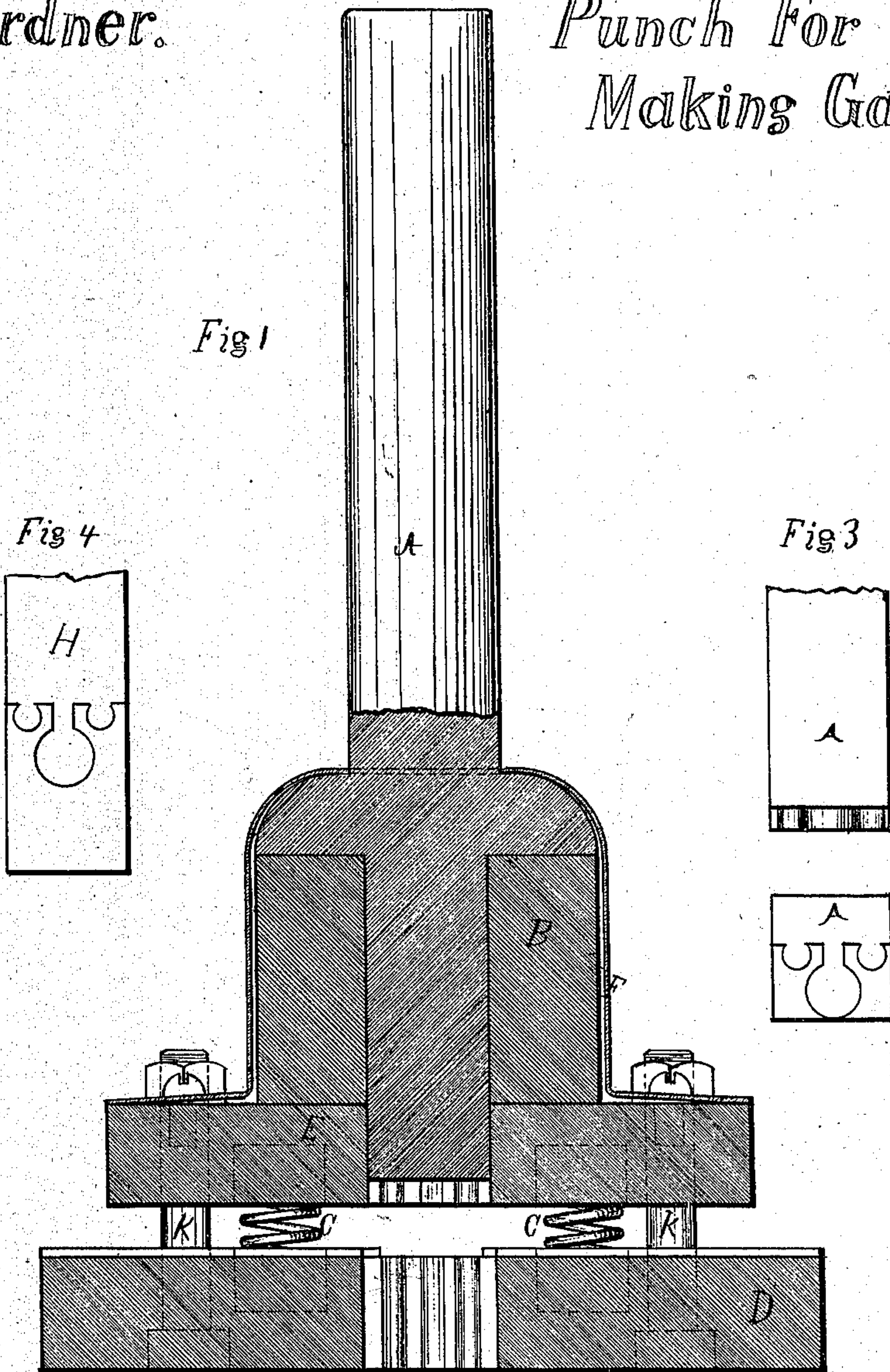


Fig 4

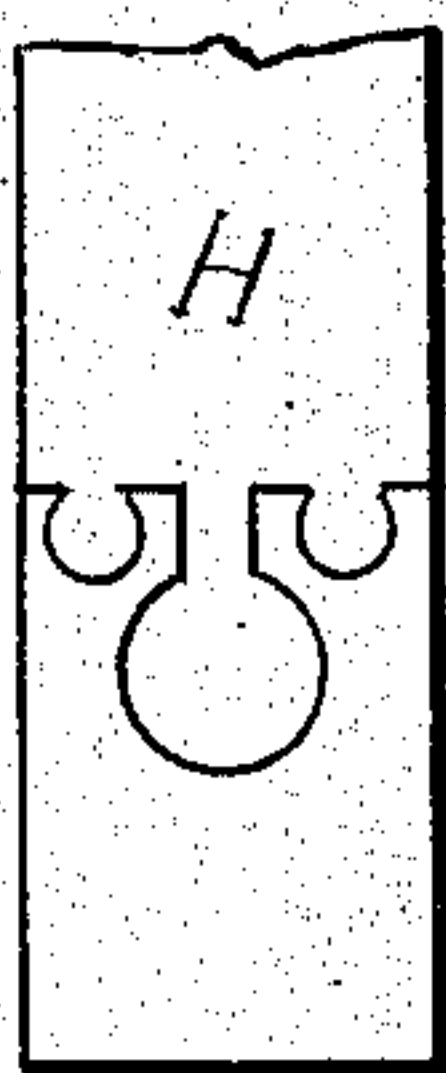


Fig 3

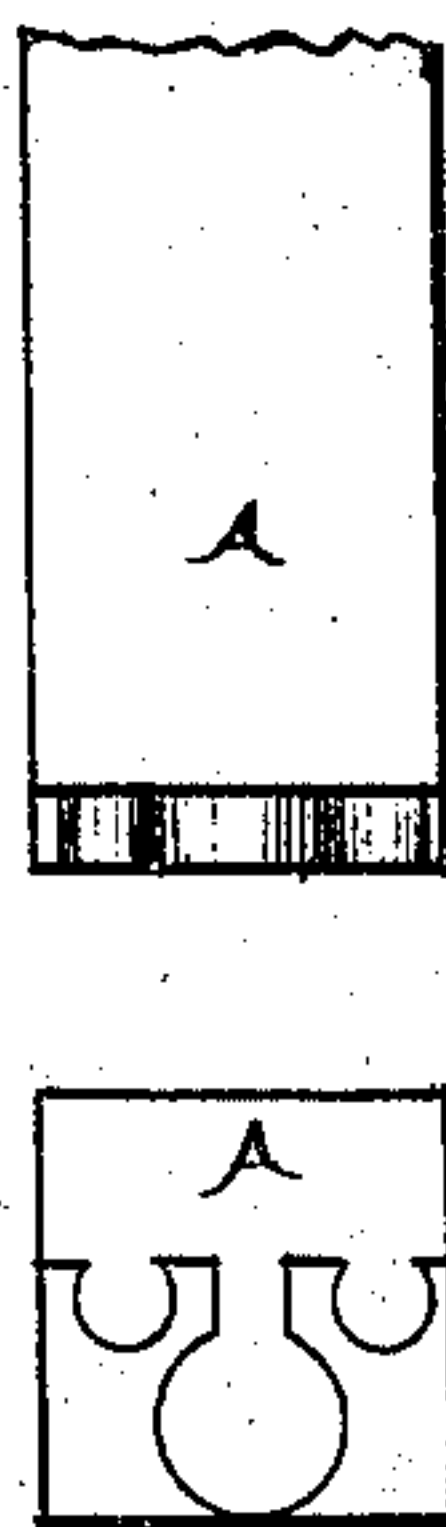
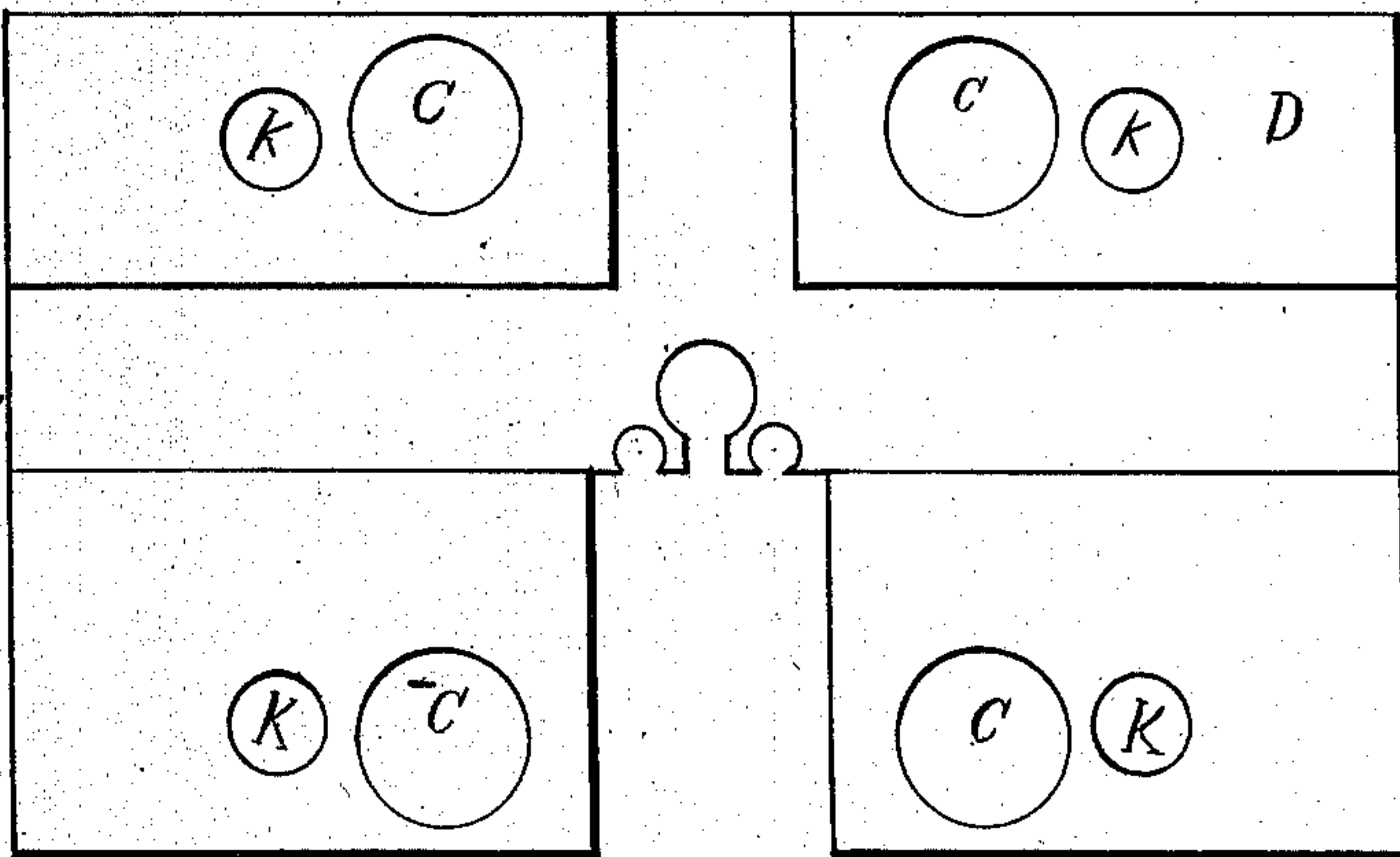


Fig 2



Witnesses
J. L. Wilson
J. Emory Jones

Inventor
M. C. Gardner

United States Patent Office.

MITCHELL C. GARDNER, OF ROCHESTER, NEW YORK.

Letters Patent No. 105,934, dated August 2, 1870.

IMPROVEMENT IN MODE OF AND DEVICES FOR MAKING GASKETS FOR STEAM PACKING.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, MITCHELL C. GARDNER, of the city of Rochester, county of Monroe and State of New York, have invented certain new and useful Improvements in the Mode of Making Gaskets used for packing steam-joints in steam-engines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing making a part of the specification.

The nature of my improvement relates to the making of gaskets for the packing of joints in steam-engines out of strips of copper or any other flexible metal, rolled to perfect thickness, in such manner as to make a gasket which, when put between two planed surfaces and screwed down, a perfect steam-joint is made, at once perfect, not liable to be cut out, and made imperfect by the pressure of steam; and, further, the saving of material by making a gasket in this way, instead of cutting it out of a whole sheet in the ordinary way, thereby saving material to a great extent.

Figure 1, sheet 1, is a view of a gasket made of copper or any flexible metal, cut in strips the width desired, annealed, and run through a rolling-mill, and made of even thickness.

The lock or joint in the corner is made with a die and punch, constructed in such manner that they will cut the male and female parts of the lock with the same die.

A, sheet 2, is a sectional view of the punch for cutting the lock or corner of the gasket.

D is the die, to co-operate with the punch, to form the lock, the male part of the lock dropping through the bottom, the female part being drawn out at the end or side, as may be required.

E is a plate, to guide the punch to die D.

C C C C are four spiral springs, to force E and D apart to receive the copper for the joint or lock.

K K K K are four bolts, to confine the copper between E and D, to perfect bearing to receive the blow for cutting the joint or corner.

B is an India-rubber spring, for throwing the punch out when struck with a hammer.

F is a clasp over the collar of the punch, to confine the punch down to a given point to receive the blow.

A A is an end view of the punch.

Should one side of the die be either larger or smaller than the other, the discrepancy is obviated by the parts going together in the same position that they are cut, as shown in the drawing, the round part in the lock being set out, when necessary, with a punch made concave on the inner circle of the end, and convex on the outer, thereby making a steam-joint around the circle of the lock. This will be necessary only when the engine is on repair, and not then, if proper care is used in taking the work apart.

Having thus fully described my improvement,

What I claim as my improvement, and desire to secure by Letters Patent, is—

1. The manner or mode of making gaskets used for packing steam-joints in steam-engines, substantially as specified and set forth.

2. The punching device, for making the corner of the gasket, substantially as specified and for the purposes set forth.

M. C. GARDNER. [L. s.]

Witnesses:

FRED. C. WILSON,
J. EMORY JONES.