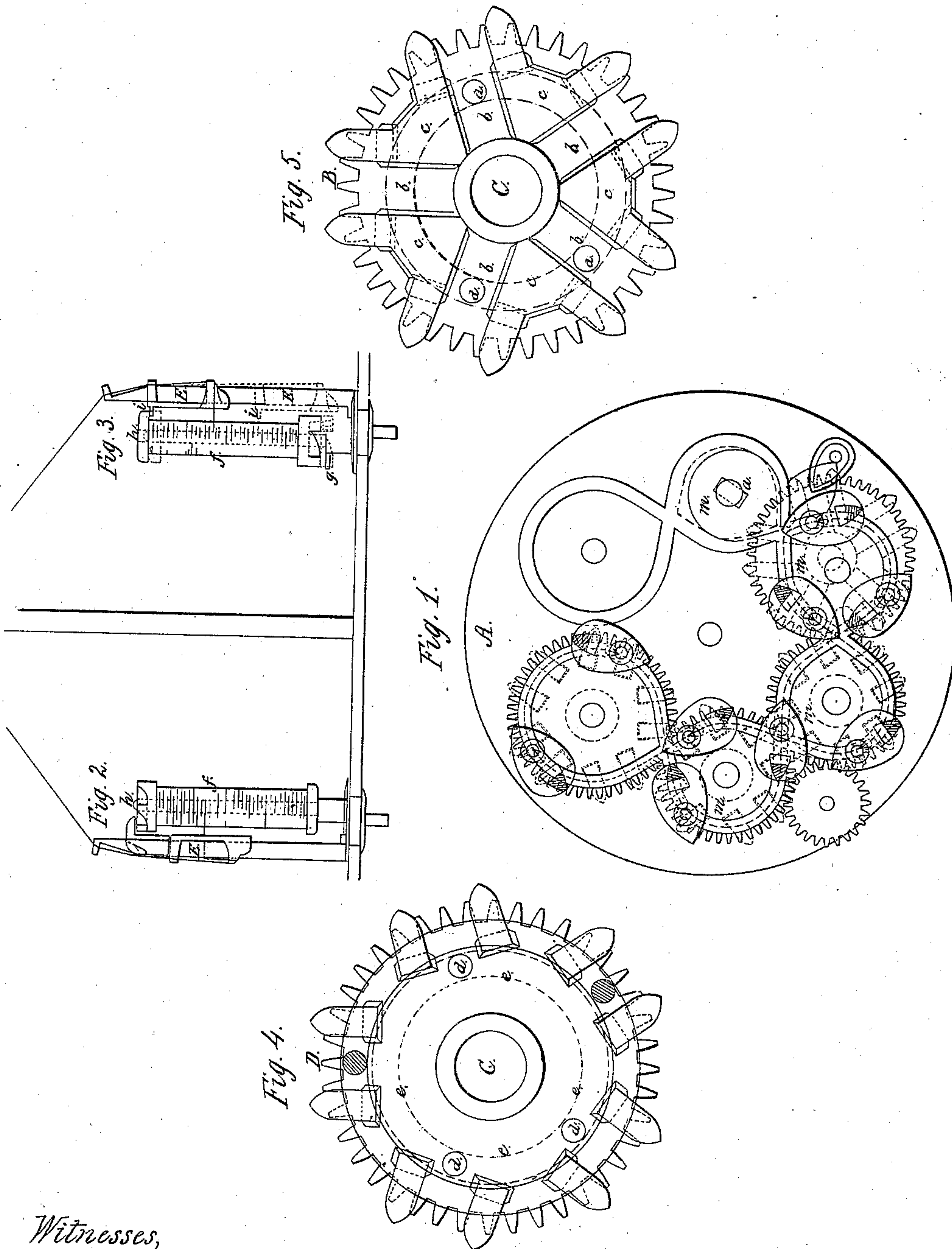


*G. Mason.*  
*Braiding Mach.*

*N<sup>o</sup> 88,576.*

*Patented Apr. 6, 1869.*



*Witnesses,*  
*Simon S. Lopham*  
*Rufus F. Angell.*

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GEORGE MASON, OF PROVIDENCE, RHODE ISLAND.

Letters Patent No. 88,576, dated April 6, 1869.

IMPROVEMENT IN BRAIDING-MACHINE.

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

Be it known that I, GEORGE MASON, of the city and county of Providence, and State of Rhode Island, have invented a new and useful Improvement on Braiding-Machines; and I do hereby declare that the following is a clear and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures on the same.

Figure 1 is a plan view of the plate and machinery of a braiding-machine.

Figure 2 is a perspective view of the old form of carrier and spool.

Figure 3 is a perspective view of the improved form of carrier and spool.

Figure 4 is a perspective view of the old form of a large or five-horned gear.

Figure 5 is a perspective view of the new and improved form of a large or five-horned gear.

The nature of my improvement consists in making the large or five-horned gear with slots on the upper side, running back to the hub of the gear, and in extending the horns of the gear back to and joining the same to the hub of the gear, and in inverting the spool on the spindle of the carrier, and placing a pin at the base of the spindle, and another at the upper portion of the tension-weight.

To enable others to make and use my invention, I will proceed to describe the same, its construction and operation.

I make a slot in the hearts *m*, fig. 1, as shown at *a*, for the purpose of enabling me to move the hearts forward to close the circuit of the travellers at any circle on the plate.

I make the large or five-horned gear *B* with slots *b b b b*, running back to the hub *C* of the gear *B* on the upper side, the lower side of the gear being cast solid.

I then extend the horns *c c c c c*, fig. 5, back, and join them to the hub of the gear *C*, and by that means close the circle between the horns and the hub of the

gear, marked *e e e e*, fig. 4. By this means I prevent the spindles *d d d* of the travellers from passing inside of the horns and round the circle *e e e e*, fig. 4, while the travellers are changing on a small heart or circle. By this means I am enabled to carry the travellers round, and change them, and complete their circuit on either a large or small circle, or heart, with the same large or five-horned gear.

By closing the circuit of the travellers, by moving the hearts forward, by means of the slot *a*, and changing the position of the improved large or five-horned gear, and removing, or adding travellers and small gears, as occasion requires, I can make narrow or wide braid, and alter the width as required, and can run several sets of travellers, and make different kinds of braid at the same time on the same machine, by having two or more large improved gears, as may be required.

I reverse the bobbin *f*, and place a pin, *g*, at the base of spindle *h*, to hold the bobbin by means of the ratchet at the base of the bobbin.

I place another pin, *i*, in the weight *E*, for the purpose of raising the bobbin, and allowing the yarn to run off as required. By this means I dispense with the weight *j*, and am enabled to use finer yarn.

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

1. The gear *B*, provided with slots, as shown at *b b b b*, and having the horns *c c c c c* extended back to and joining the hub *C* of the gear, substantially as described.

2. The combination of the reversed bobbin *f*, the pin *g*, in base of spindle, and the pin *i*, in the top of the weight *E*, as herein described, and for the purposes specified.

GEORGE MASON.

Witnesses:

SIMON S. LAPHAM,  
RUFUS J. ANGELL.