

(No Model.)

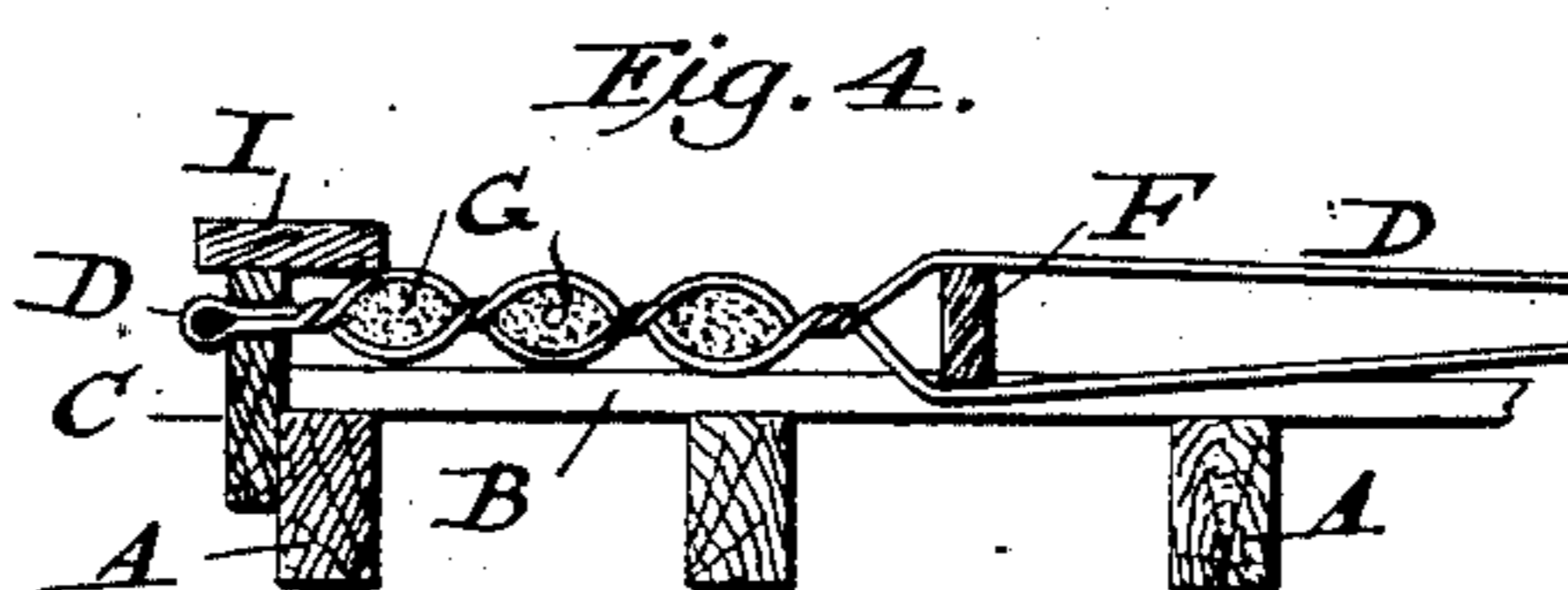
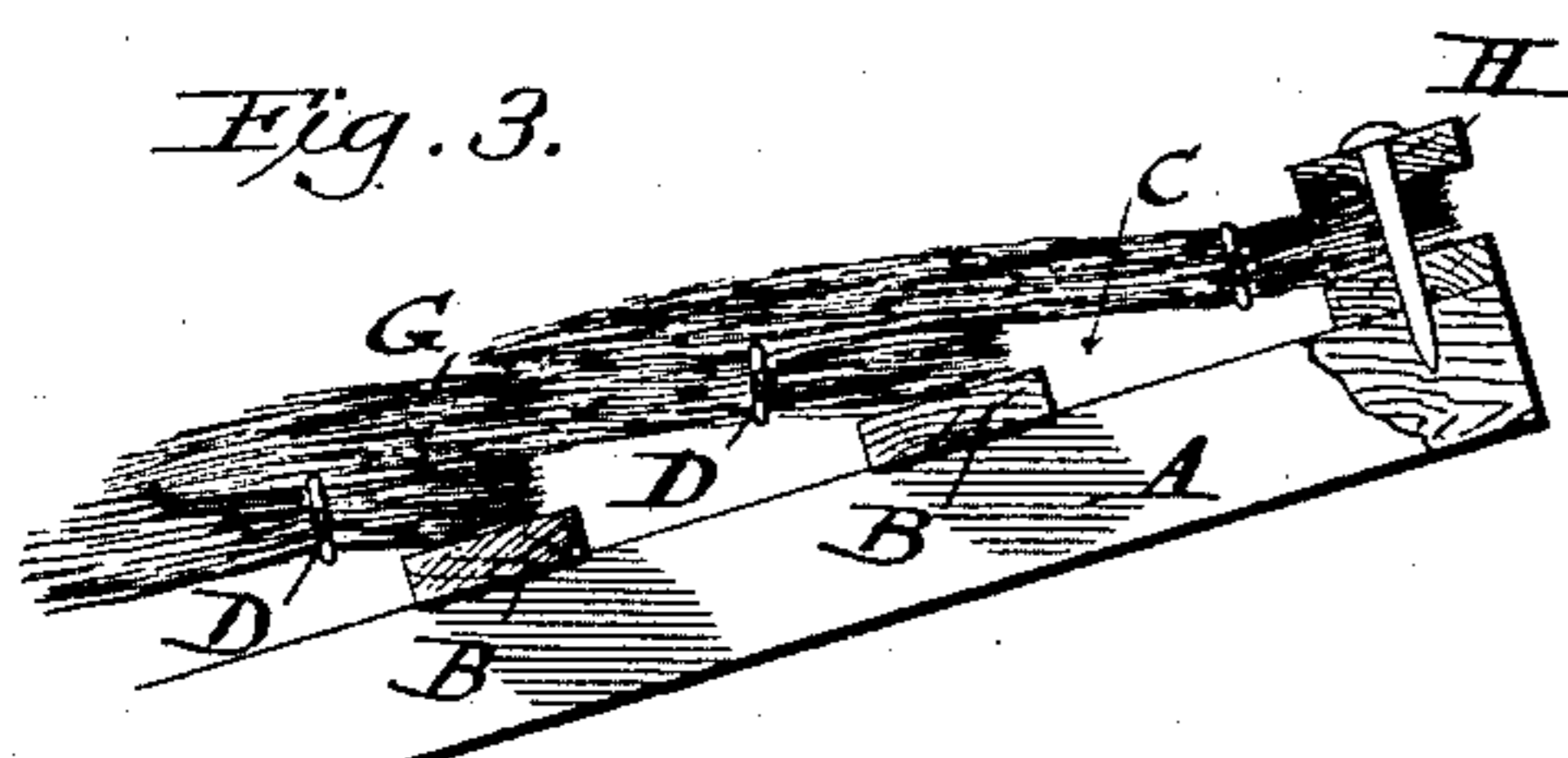
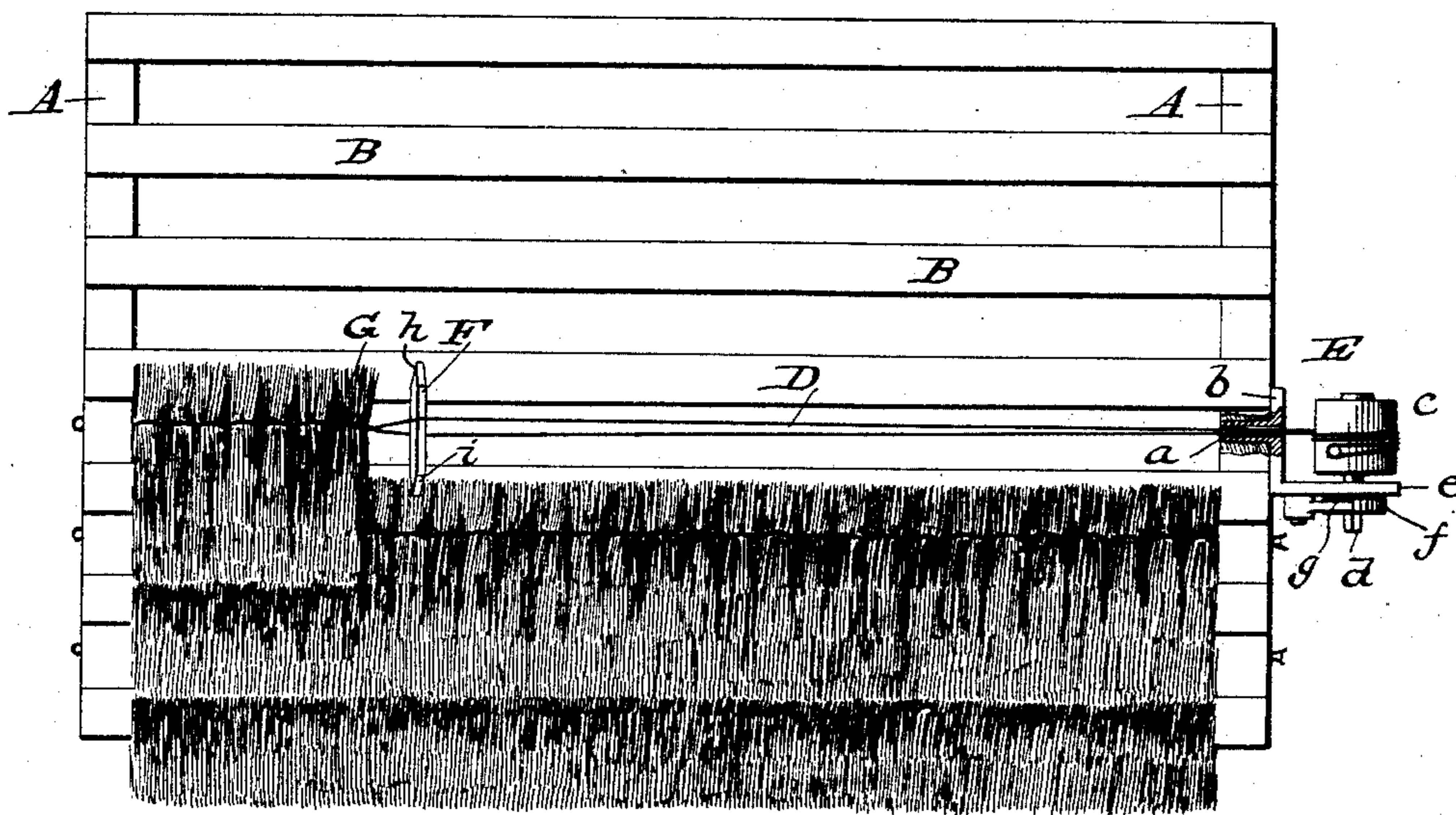
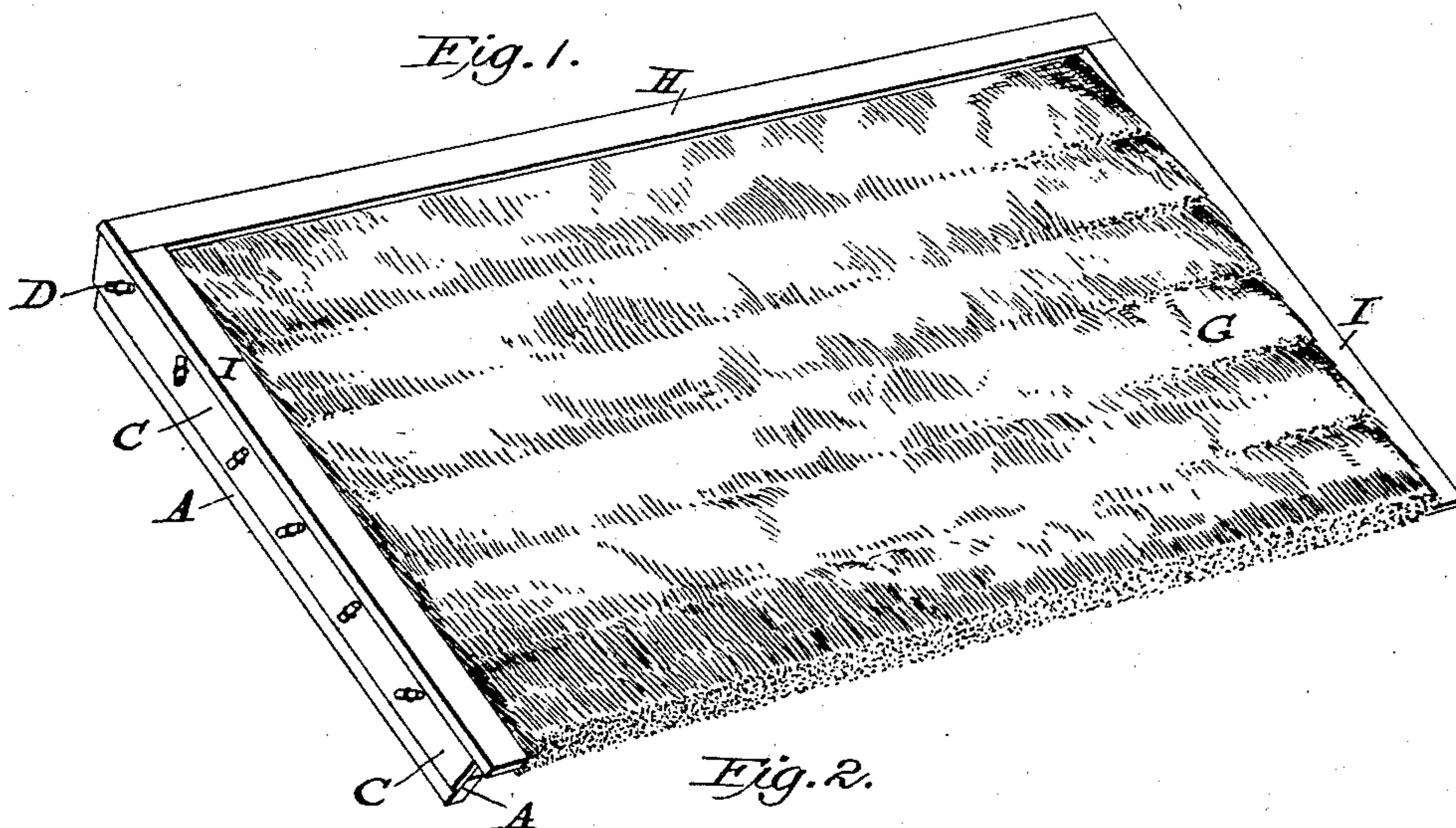
2 Sheets—Sheet 1.

H. STEDDOM, Jr.

THATCHED ROOFING AND METHOD OF AND APPARATUS FOR
CONSTRUCTING THE SAME.

No. 370,984.

Patented Oct. 4, 1887.



Witnesses:
James D. Duffin
Matter S. Dodge.

Inventor:
Henry Steddom Jr.
By his Attorneys
Dodge & Son.

(No Model.)

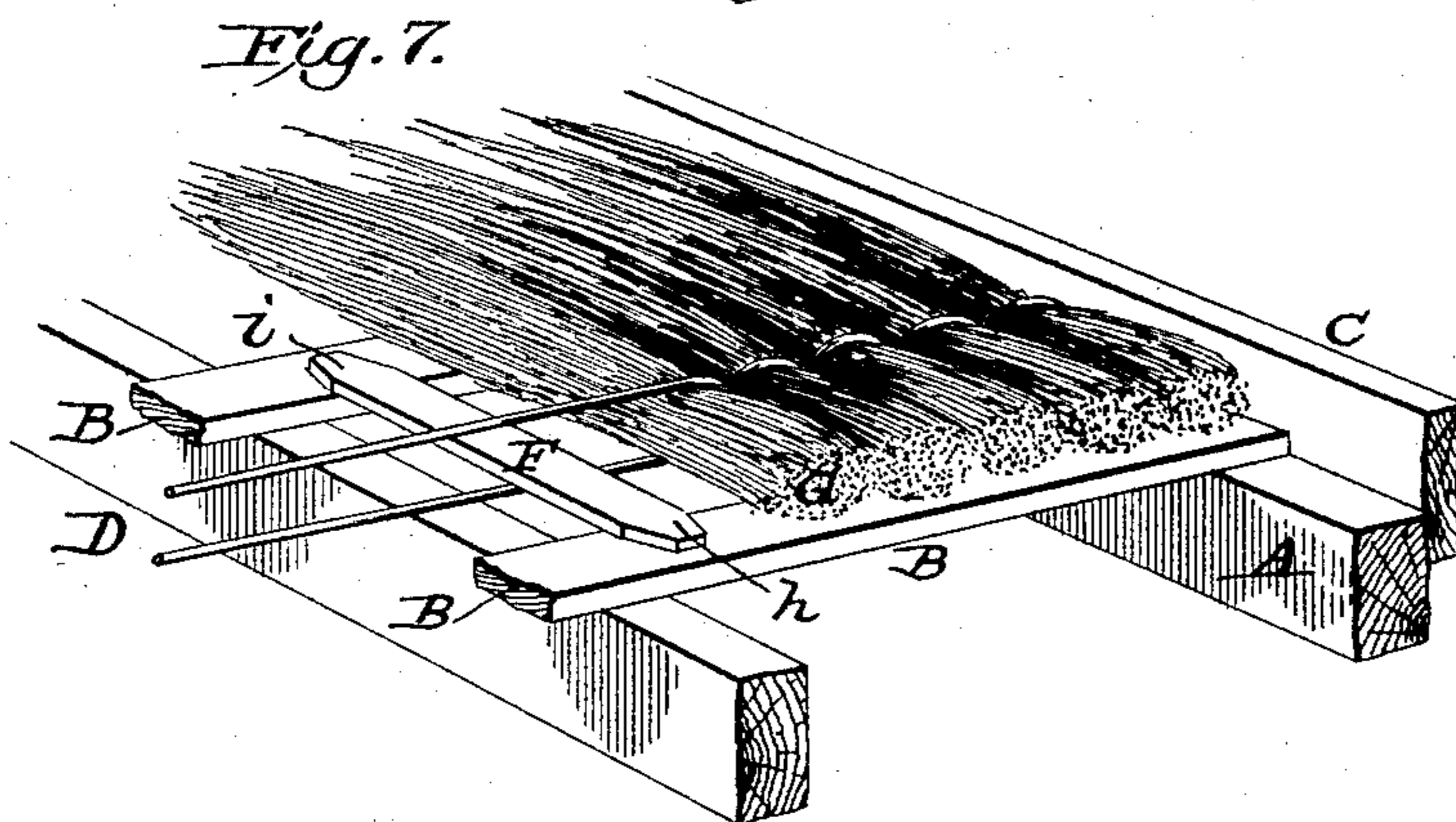
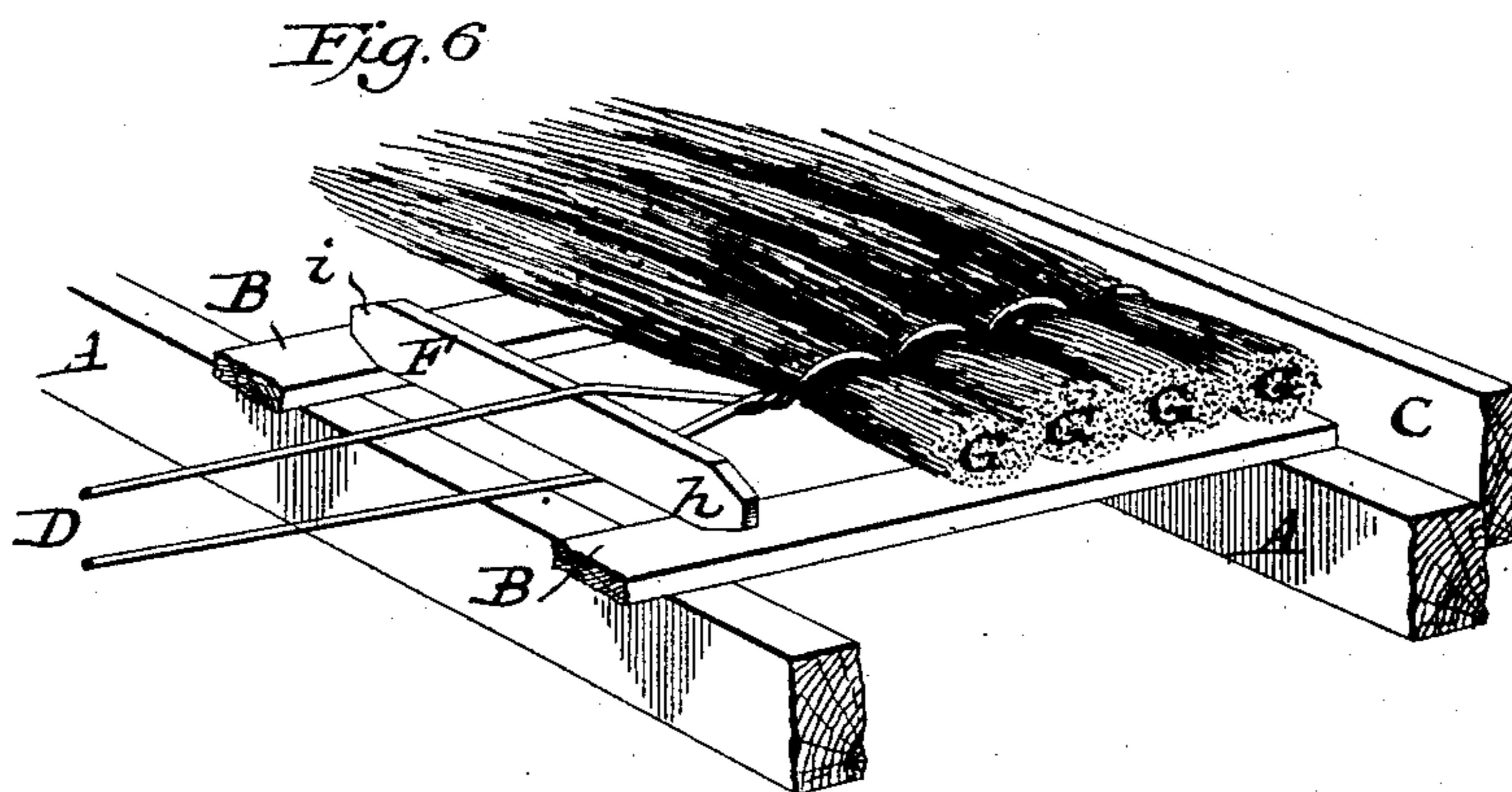
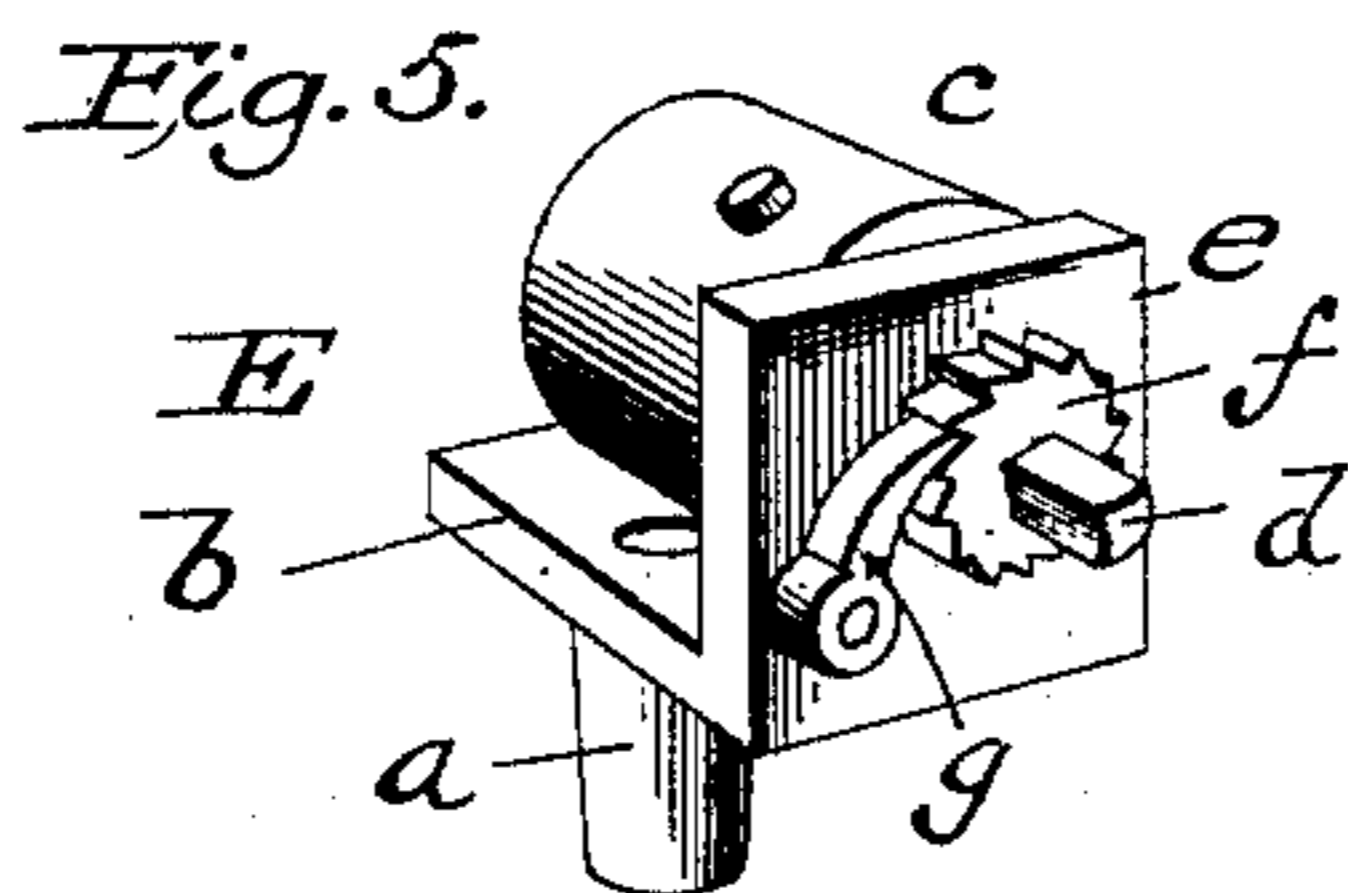
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UNITED STATES PATENT OFFICE.

HENRY STEDDOM, JR., OF OSKALOOSA, IOWA.

THATCHED ROOFING AND METHOD OF AND APPARATUS FOR CONSTRUCTING THE SAME.

SPECIFICATION forming part of Letters Patent No. 370,984, dated October 4, 1887.

Application filed July 11, 1887. Serial No. 243,987. (No model.)

To all whom it may concern:

Be it known that I, HENRY STEDDOM, Jr., of Oskaloosa, in the county of Mahaska and State of Iowa, have invented certain new and useful Improvements in Thatched Roofing and Method of and Apparatus for Constructing the Same, of which the following is a specification.

My invention relates to that class of roofs known as "thatched" roofs; and it consists in a novel means of constructing the same, as hereinafter set forth and claimed.

The object of my invention is to economize in lumber and labor, and to completely and thoroughly secure the roof in place.

In the accompanying drawings, Figure 1 is a perspective view of a roof constructed in accordance with my invention; Fig. 2, a top plan view showing the roof in the process of construction; Figs. 3 and 4, sectional views at right angles to each other; Fig. 5, a perspective view of the tension device employed in weaving the shingles or wisps together, and Figs. 6 and 7 detailed views illustrating the manner in which the weaving of the wire about the wisps or shingles is effected.

Referring again to the drawings, A indicates the rafters of a roof, and B slats or laths extending transversely across the same and separated a distance apart, as clearly shown in Figs. 2 and 3.

Secured to the side rafters are boards C, which project upward above the top of the slats, as shown in Figs. 1 and 4.

In constructing my roof I first secure the binding wires or bands D, at suitable points in the length of the strips C, between the laths, as shown in Figs. 1 and 4, the said strands consisting of wire or cord, and may be formed of two separate strands or of a single strand doubled upon itself, as preferred. The opposite end of the band D is extended through a hole or opening formed in the strip or board C, secured to the opposite side of the roof, the said binding-band being connected or attached to a tension device, E, which is shown in Figs. 2 and 5. This tension device comprises a broad base-plate, *b*, from the center of which projects a tubular sleeve or hub, *a*, which latter fits into the opening in the strip C, in a manner shown in Fig. 2, and the binding-wires

D pass through this tubular sleeve when the latter is inserted into the openings in the strips C.

Projecting laterally from the base-plate *b* is an arm, *e*, carrying a stud or axle, *d*, which latter in turn carries, on opposite sides of the upright *e*, a drum, *c*, and ratchet-wheel *f*. The drum *c* is located in line with a tubular hub, *a*, so that the wire which passes through said hub may be wound upon the drum, as shown in Fig. 2, the drum being provided with a pin or other suitable device by which to securely hold the end of the wire. The end of the shaft *d*, projecting beyond the face of the ratchet-wheel *f*, is squared or fitted to receive a wrench or handle by which it may be turned, the backward rotation of the shaft being prevented by means of a pawl or dog, *g*, pivoted to the side of the upright *e*. After the binding-wire D is firmly secured to one of the strips C the tubular hub *a* of the tension device is inserted into the corresponding hole of the opposite strip C and the end of the wire passed through the tubular hub and secured to the drum *c*. By turning the shaft *d* the wire is wound upon the drum until it acquires the necessary tension, and the drum is prevented from backward rotation by means of a pawl, as before stated. The tension of the wire is such as to cause the tension device E to adhere to the outer face of the strip C; but the latter is at all times free to revolve or rotate upon its tubular hub *a*, for a purpose presently explained herein.

Referring to Figs. 2, 6, and 7, the manner of weaving the roof will be explained.

With the parts in the position shown in Fig. 2, the shuttle F is inserted between the strands of wire or cord and turned up upon edge, as clearly shown in Fig. 6, thereby separating the strands of the wires sufficiently for the introduction between them of a wisp or shingle, G. After the wisp or shingle is thus inserted the shuttle is turned down upon its flat side, as shown in Figs. 2 and 7, with its opposite ends, *h* and *i*, resting upon the laths, and is then moved longitudinally between the strands of wire in the direction of the rafters, so that its upper point, *h*, may pass the lower edge of the lath, upon which it rested. As soon as the shuttle is moved far enough to

clear the lath, it is turned over end for end, so that the point *i* may rest upon the lath formerly occupied by the point *h*; or, if desired, the shuttle may make one complete turn, so that the point *h* shall rest upon the same lath that it rested upon previous to twisting the wires. This operation twists the two strands of the wires firmly and securely about the wisps or shingles, as clearly shown in Figs. 2, 6, and 7, the number of turns or twists given the wire being varied as desired.

Owing to the fact that that end of the band or wire *D* secured to the tension device may rotate or turn upon its longitudinal axis, the portion of the wire between the shuttle and the said tension device will not become twisted, and hence any tendency there might otherwise be of the wire to untwist from around the wisps or shingles is obviated. This operation is repeated all the way across the roof until the full number of wisps or shingles is secured in place. When this is done, the tension device may be slackened and removed and the end of the wire or band *D* secured in any suitable manner.

In constructing a roof in accordance with my invention the work will be begun at the lower edge of the roof, so that the wisps or shingles that are applied may project over and upon the top of those previously secured in place.

The material of which to form the wisps or shingles may be varied as desired, as may also the material used for the binding-band *D*.

It will also be obvious that instead of employing separate strips or boards *C C* the rafters at the sides of the roof may be formed with an upwardly-projecting portion, which will serve the same purposes as these strips.

After the thatching is secured in place I fasten upon the front edge of the upper or top row of shingles or wisps a strip, *H*, which may be nailed or otherwise secured to the uppermost lath or slat in order to protect the exposed ends of the top row of shingles or wisps from the weather. Similar strips, *I*, will be applied along the sides of the roof on the top of the rafters, or to the top of the strips *C*, in case the latter be used.

Having thus described my invention, what I claim is—

1. In a roof, the combination, with the rafters *A A* and the transverse slats or laths *B B*, of the double-wire band *D*, secured at its ends to opposite sides of the roof, and the wisps or shingles *G*, inserted between the strands of the band *D*, the band being twisted between the separate wisps or shingles.

2. In an apparatus for constructing thatched roofs, the combination, with the strips *C C*, provided with a series of holes or perforations, of the double-strand binding-wire *D*, secured rigidly at one end to one side of the roof, a rotatable or turning support for the opposite end of said binding-wire, and a shuttle, *F*, adapted and arranged, substantially as shown, to twist the wires about each wisp or shingle.

3. In an apparatus for constructing thatched roofs, the combination, with the perforated strips *C C*, or their described equivalents, of a tension device secured to one side of the roof and rotatable bodily in relation thereto, and a double strand binding wire or cord secured at one end to the tension device and at the other end to the strip *C* opposite the tension device.

4. In an apparatus for constructing thatched roofs, the herein-described tension device, consisting of a plate, *b*, a hollow or tubular hub, *a*, projecting from one side of said plate, and a winding-drum, *c*, located directly opposite the tubular hub.

5. In an apparatus for constructing thatched roofing, the herein-described tension device, comprising a plate, *b*, a tubular hub, *a*, projecting from one side of said plate, an arm, *e*, projecting from the opposite side of said plate, a shaft, *d*, provided with a winding-drum, *c*, and a ratchet-wheel, *f*, and having its ends squared, and a pawl or dog, *g*, adapted to engage with the ratchet-wheel, all substantially as shown.

In witness whereof I hereunto set my hand in the presence of two witnesses.

HENRY STEDDOM, JR.

Witnesses:

H. C. MOORE,
C. P. SEARLE.