(No Model.)

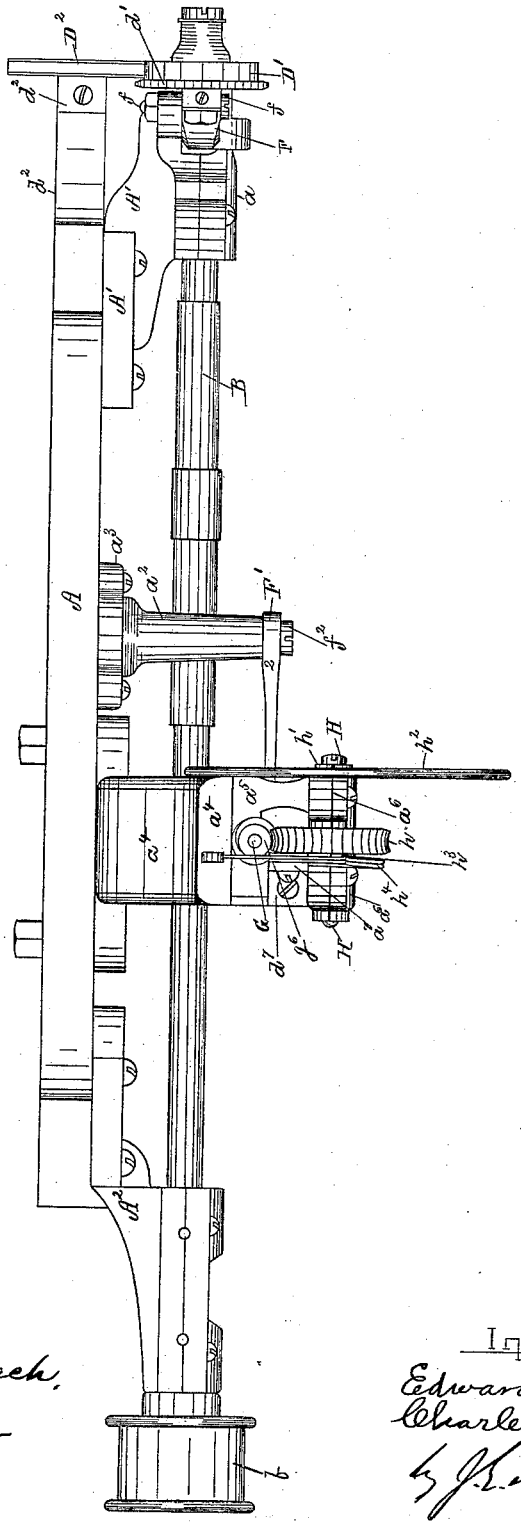
4 Sheets—Sheet 1.

E. L. TAFT & C. L. JONES.

RATTAN MEASURING MACHINE.

No. 383,197. Patented May 22, 1888.

Fig. 1.



Witnesses.
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(No Model.)

4 Sheets—Sheet 2.

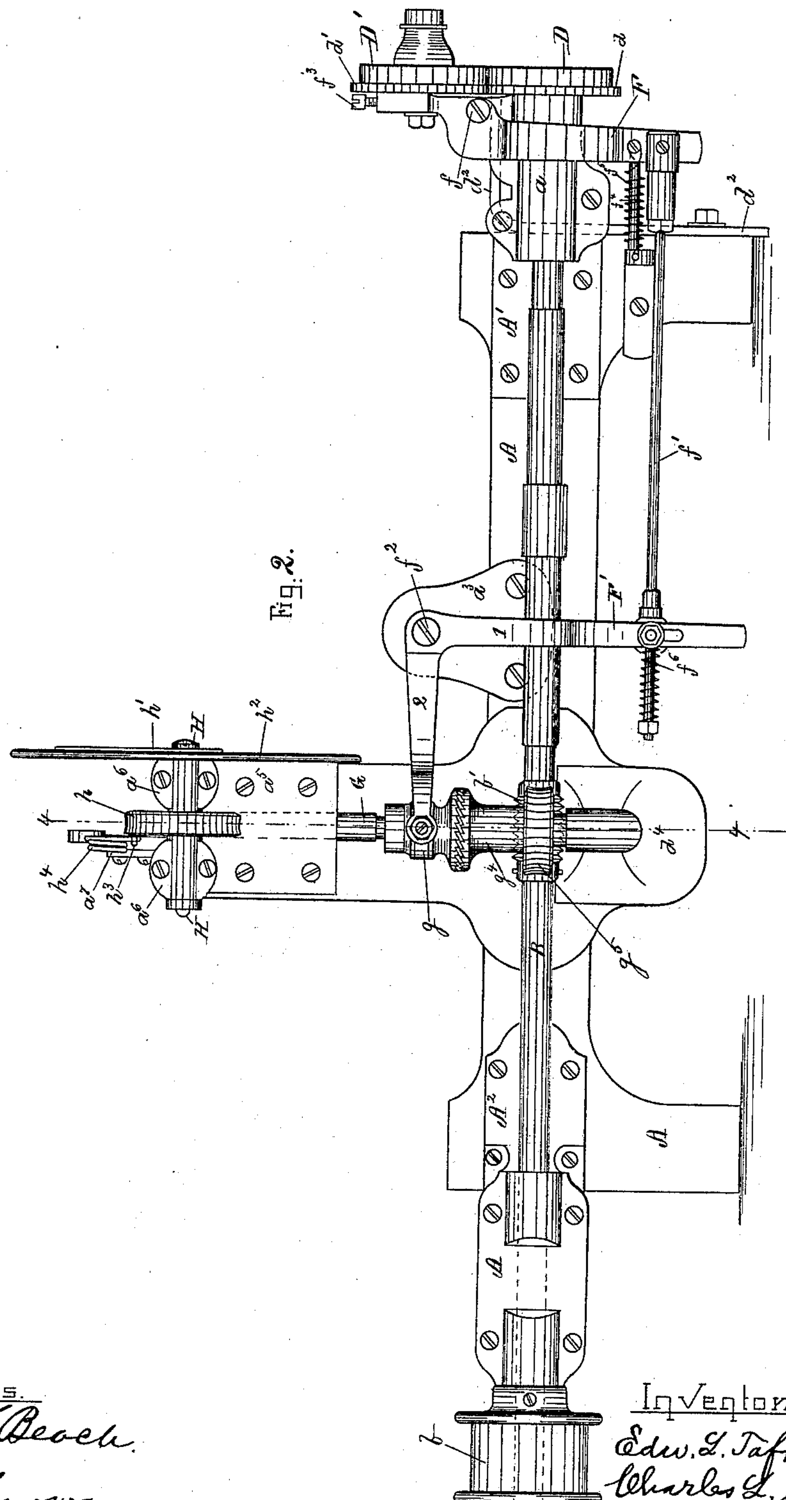
E. L. TAFT & C. L. JONES.

RATTAN MEASURING MACHINE.

No. 383,197.

Patented May 22, 1888.

Fig. 2.



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(No Model.) 4 Sheets—Sheet 3.

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RATTAN MEASURING MACHINE.

No. 383,197. Patented May 22, 1888.

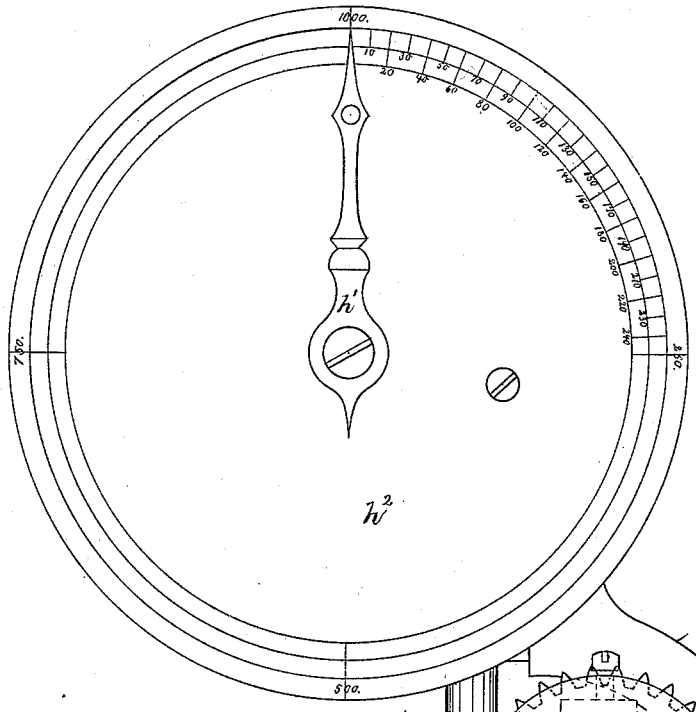
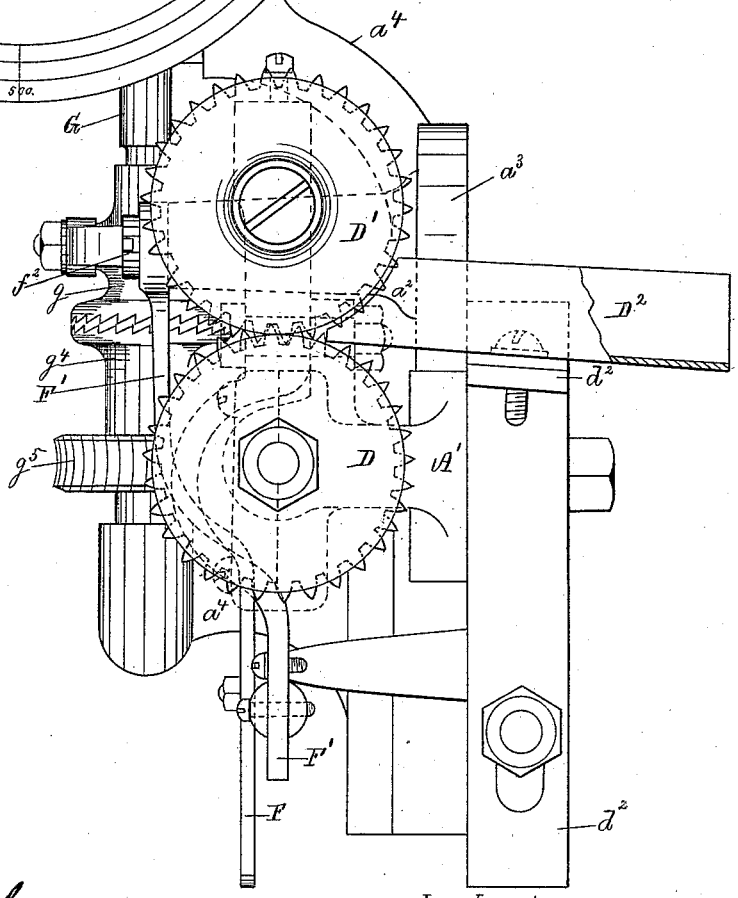


Fig. 3.



Witnesses.
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(No Model.) 4 Sheets—Sheet 4.

E. L. TAFT & C. L. JONES.

RATTAN MEASURING MACHINE.

No. 383,197. Patented May 22, 1888.

Fig. 4.

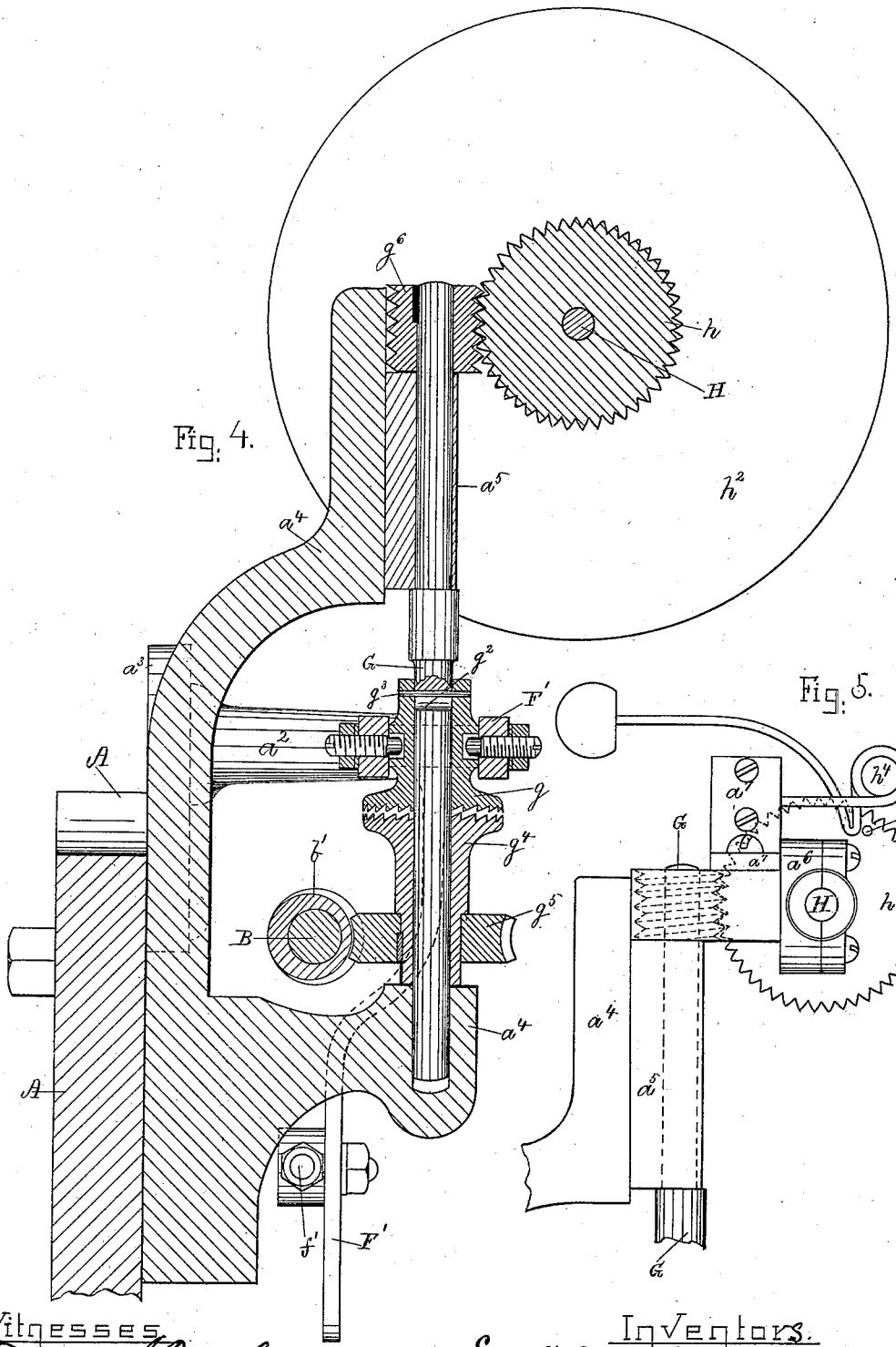

Fig. 5.

Witnesses.
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UNITED STATES PATENT OFFICE.

EDWARD L. TAFT AND CHARLES L. JONES, OF GARDNER, MASSACHUSETTS, ASSIGNORS TO HEYWOOD BROTHERS & CO., OF SAME PLACE.

RATTAN-MEASURING MACHINE.

SPECIFICATION forming part of Letters Patent No. 383,197, dated May 22, 1888.

Application filed April 11, 1887. Serial No. 234,457. (No model.)

To all whom it may concern:

Be it known that we, EDWARD L. TAFT and CHARLES L. JONES, both of Gardner, in the county of Worcester and State of Massachusetts, have invented a new and useful Measuring-Machine, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a plan, Fig. 2 a side view, and Fig. 3 an end view, partly in section, of our machine. Fig. 4 is a sectional view, enlarged, on line 4 4 of Fig. 2, and Fig. 5 is a detail.

Our machine is especially intended for measuring rattan and the like; and our invention consists in certain novel combinations of operative parts, hereinafter set forth and claimed.

In the drawings, A is the main frame of our machine, and B is the main shaft mounted in brackets A′ A² in a way too well known to require description. Main shaft B is driven by a belt on pulley *b*, and carries a feed-wheel, D, which rotates with a feed-wheel, D′, mounted on a stud which projects from one end of lever F, fulcrumed at *f*, on an arm of box *a* fast to bracket A′, the feed-wheels being provided with gears *d d′*, which mesh with each other to compel coincident rotation of the feed-wheels. The other end of lever F is connected to a rod, *f′*, which is connected to an arm, 1, of bent lever F′, which is fulcrumed at *f*² to an arm, *a*², of bracket *a*³ on frame A. The other arm, 2, of lever F′ engages clutch *g* on shaft G, which is mounted in bracket *a*⁴, and a block, *a*⁵, fast to bracket *a*⁴ on frame A. Shaft G is slotted at *g*² to receive pin *g*³, by which clutch *g* is compelled to move with shaft G, clutch *g* being free, however, by reason of the slot *g*², to move up and down on the shaft G. The gland *g*⁴ for clutch *g* is loosely mounted upon shaft G, and is driven by a worm, *b′*, on shaft B, which meshes with pinion *g*⁵, splined to gland *g*⁴. Shaft G carries splined upon it a pinion, *g*⁶, which meshes with a pinion, *h*, fast on shaft H, mounted in boxes *a*⁶, secured to block *a*⁵. Shaft H carries a pointer, *h′*, which moves over the face of the dial *h*², fast to the bracket *a*⁴. (See Fig. 3.) The pinion *h* carries a pin, *h*³, which once in every rotation of the pinion (corresponding to a complete movement of the pointer *h′* around the face of the dial *h*²) engages the spring bell-hammer *h*⁴, secured at one end to a block, *a*⁷, fast to an arm of block *a*⁵, so that the hammer is caused to strike a bell placed in proper relation to the hammer. The sliding piece *d*² adjustable on frame A, preferably by means of set-screw, as shown, carries a guide, D².

The operation of our machine is as follows: The workman places a strand in the guide D² and thrusts it forward endwise between the feed-rolls D D′, whereby the roll D′ is moved away from the roll D, the lever F moving on its fulcrum *f* against the force of spring *f*⁵, and moving the rod *f′* and bent lever F′, so that the clutch *g* is thrown into engagement with its gland *g*⁴, which is rotated by the meshing of worm *b′* on main shaft B with the pinion *g*⁵, fast on gland *g*⁴. As shaft G rotates, its pinion *g*⁶ meshes with pinion *h* on shaft H, and the pointer *h′* is moved over the face of the dial *h*², as will be plain without further description. The rolls D D′ rotate with each other, and the other parts are so timed and adapted to each other that each rotation of the feed-wheel D causes a definite movement of the pointer *h′*, so that there is accurately indicated on the face of the dial, which may be marked or figured according to any desired scale, the exact length of material measured; but all this will be readily understood by all skilled in the art without further description.

It will be readily understood that when the strand passes from between the feed-rolls D D′, the spring *f*⁵, acting on the lever F, moves the lever F in such wise as to unclutch the clutch *g* and its gland *g*⁴, and thereby stop the pointer.

We are aware of Richardson's patent, No. 167,358, of 1875, and No. 189,957, of 1877, and the German patent, No. 31,153, dated May 2, 1885, and disclaim all that is shown in them.

What we claim is—

1. Feed-wheel D, provided with gear *d*, and feed-wheel D′, provided with gear *d′*, in combination with pointer *h′*, dial *h*², and means, substantially such as described, for connecting the feed-wheels and pointer, the gears *d d′* meshing together, and all arranged and operating substantially as described.

2. Feed-wheel D, provided with a gear, *d*, in combination with feed-wheel D′, provided with gear *d′*, and mounted on a lever, F, in

combination with pointer h', dial h^2, and means, substantially such as described, for connecting the feed-wheels and pointer, all arranged and operating substantially as set forth.

3. Feed-wheels D D', pointer h', dial h^2, and means, substantially such as described, for connecting the feed-wheels and pointer, in combination with a bell-hammer, h^4, all arranged and operating substantially as and for the purpose set forth.

EDWARD L. TAFT.
CHARLES L. JONES.

Witnesses:
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JULIAN P. DUNN.