

S. W. HALL.

Fences.

No. 133,853.

Patented Dec. 10, 1872.

SHEET. No. 1.

Fig. 1.

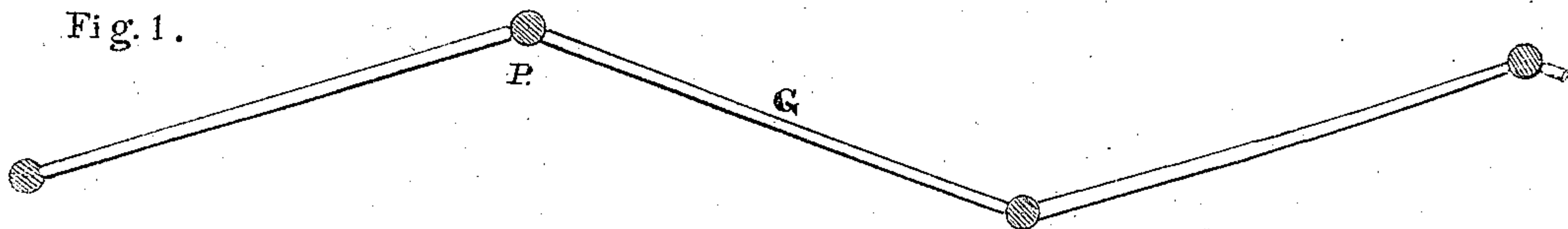


Fig. 2.

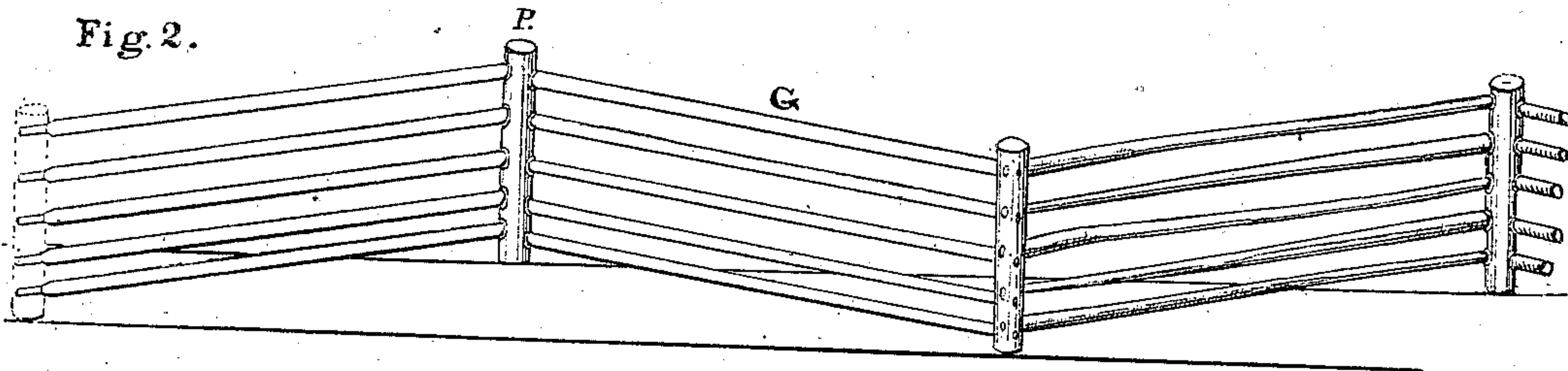


Fig. 3.

Scale of Fig. 1. 2.

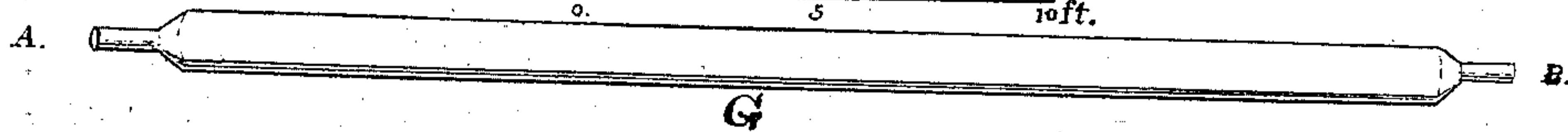


Fig. 4.



Fig. 5.

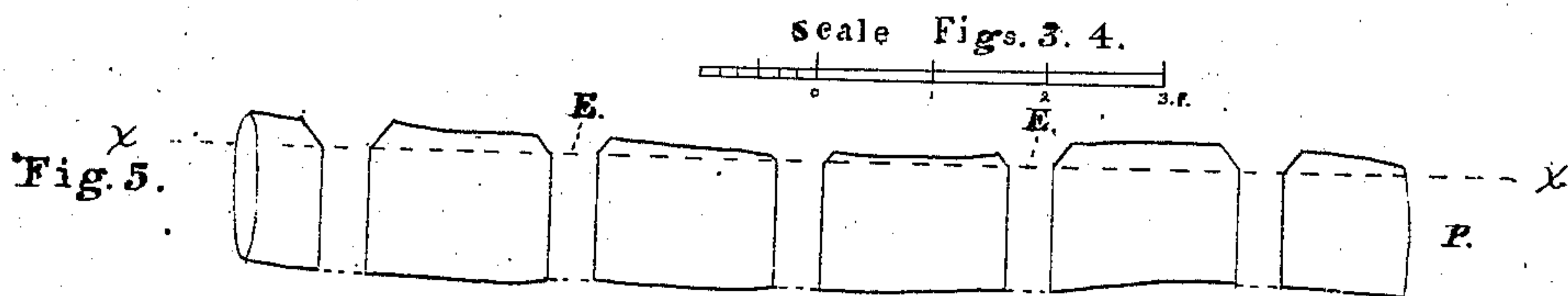
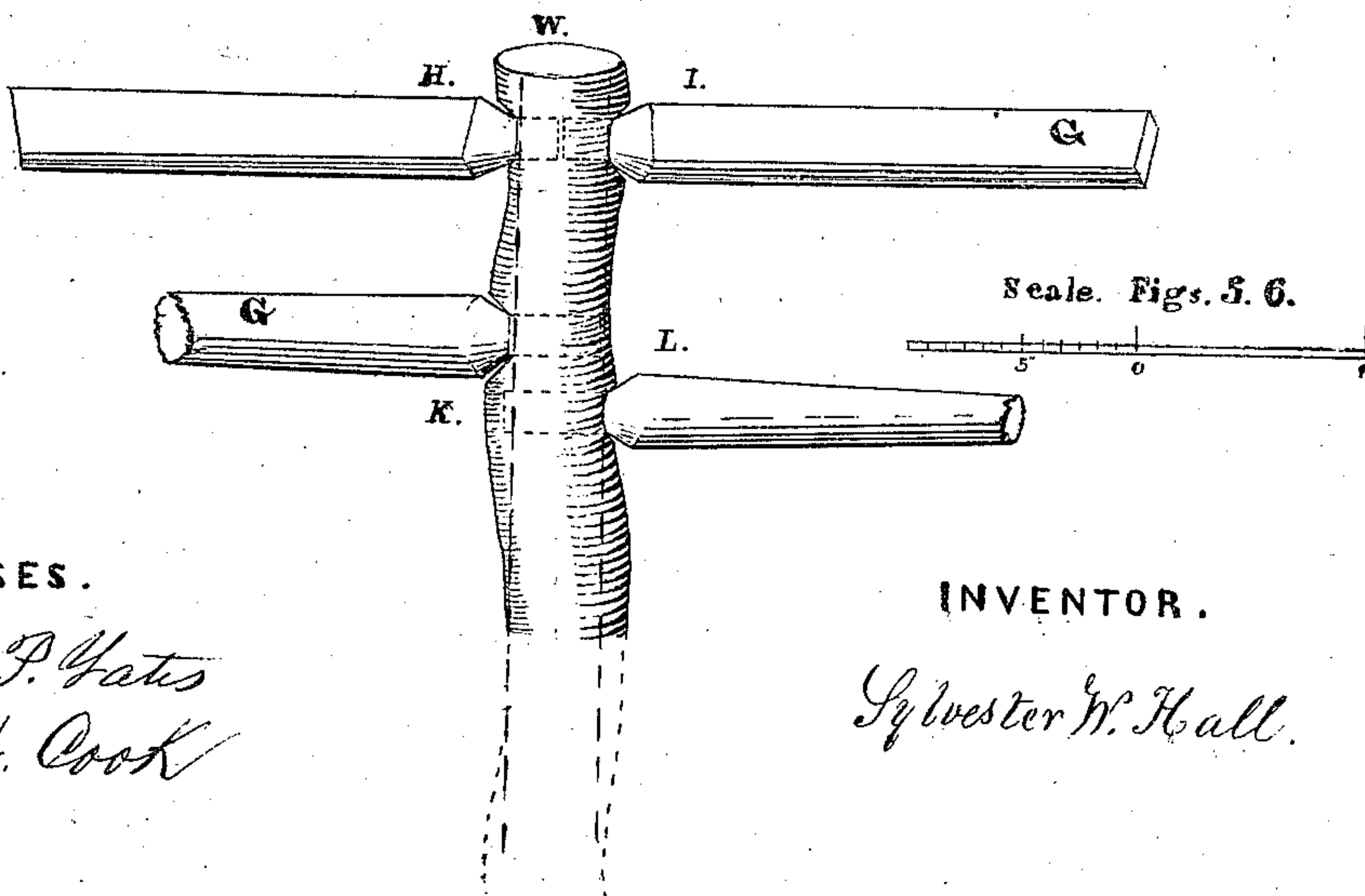


Fig. 6.



WITNESSES.

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SYLVESTER W. HALL, OF ELMIRA, NEW YORK.

IMPROVEMENT IN FENCES.

Specification forming part of Letters Patent No. 133,853, dated December 10, 1872.

To all whom it may concern:

Be it known that I, SYLVESTER W. HALL, of Elmira, Chemung county, New York, have invented certain Improvements in the Construction of Fences, of which the following is a specification:

My improvements relate to the bearings in farm-fences. My object is economy.

I use that class of material generally most abundant—such as rails, round poles and posts—and so combine them as to secure increased strength and durability. The post-and-rail-fence is old, and is expensively built, and supported by sinking the posts in the ground. The worm or Virginia fence is old, and requires too large an amount of materials, and is only self-supporting in a small degree. Worm-fences are sometimes built having a short post standing at the angles, on the surface of the ground, but they are usually of a very unstable character.

I make no claim to either of the above forms.

As an improvement, I have invented a rail or pole fence, in the worm or angular form, having a short post at the angle, with such improved connections and bearings as to give sufficient support to the fence and render it more durable.

Figure 1 of the drawing is a plan, showing the angular form of fence. Fig. 2 is a perspective view of the same. Figs. 3 and 4 are side elevations of the rails, showing the tenons and shoulders, as A B and C D, turned on the ends. Fig. 5 is a longitudinal section through the post in the plane of one set of holes, and showing the countersinks E E and the line of bearing *xx*. Fig. 6 shows the countersink and parallel bearings, as H I and K L.

The rails or poles for the bars G of the fence are all sawed to uniform lengths and have tenons on their ends turned down to one uniform size and length. These are what I call interchangeable rails. The posts P are of usual size, about five feet long, bored with two sets of holes, at a uniform angle, to form the worm of the fence, and each set of holes must be in the same vertical plane, or "out of wind."

To provide against crooks or swells in the shape of posts, the holes of each set are countersunk on one side to an equal and uniform distance from the center of the post—in other words, to a line parallel with the axis of the post. The posts shown in Figs. 5 and 6 are countersunk to parallel bearings. The bearings should also be full—that is to say, the tenons should completely fill the hole.

By this arrangement of posts and rails sufficient stiffness is given to the joints or connections of posts and rails to maintain the post, by leverage on the tenons, in an upright position, when built in the angular form.

The use of countersunk holes and parallel bearings will also be found advantageous in building straight fence with round or crooked posts W.

I claim as my invention—

A fence-post bored and countersunk to parallel bearings, in combination with the interchangeable rails, tenoned and shouldered, substantially as described.

SYLVESTER W. HALL.

Witnesses:

WILLIAM P. YATES,
ELISHA H. COOK.