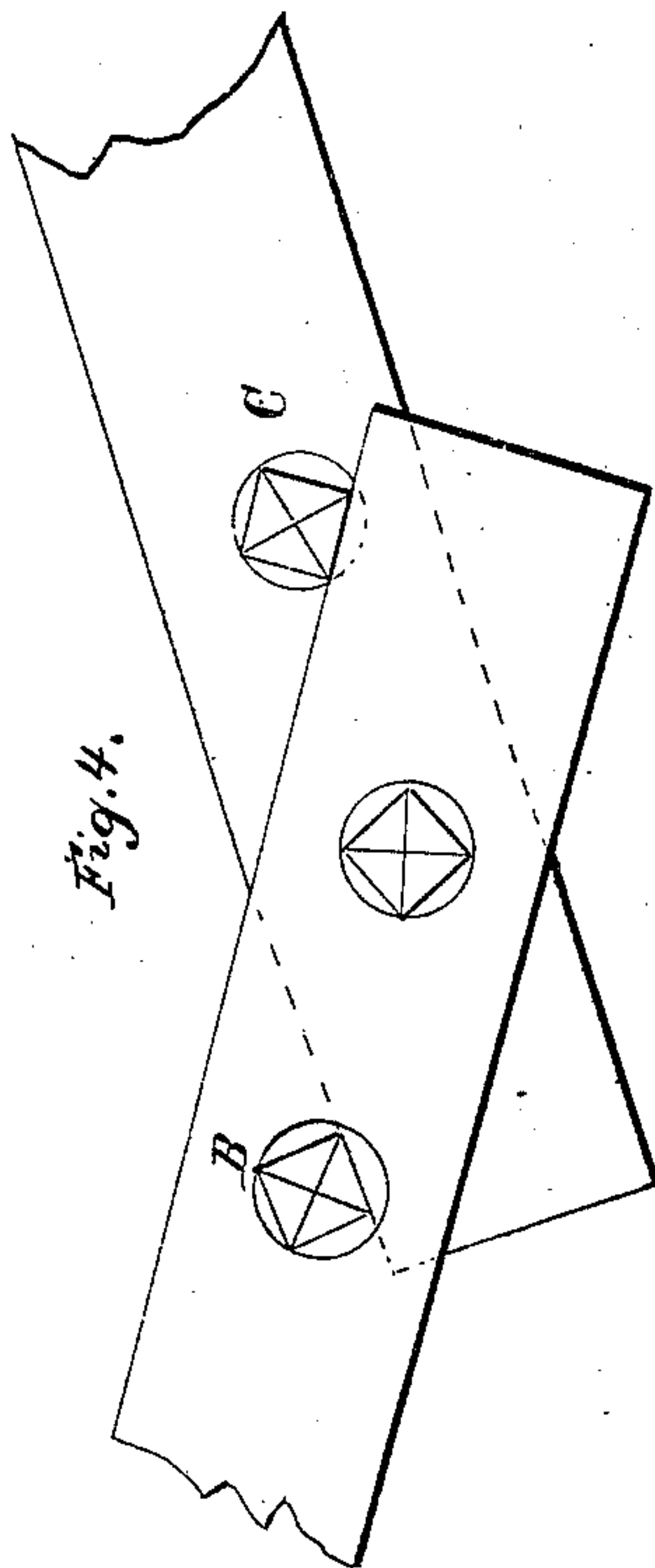
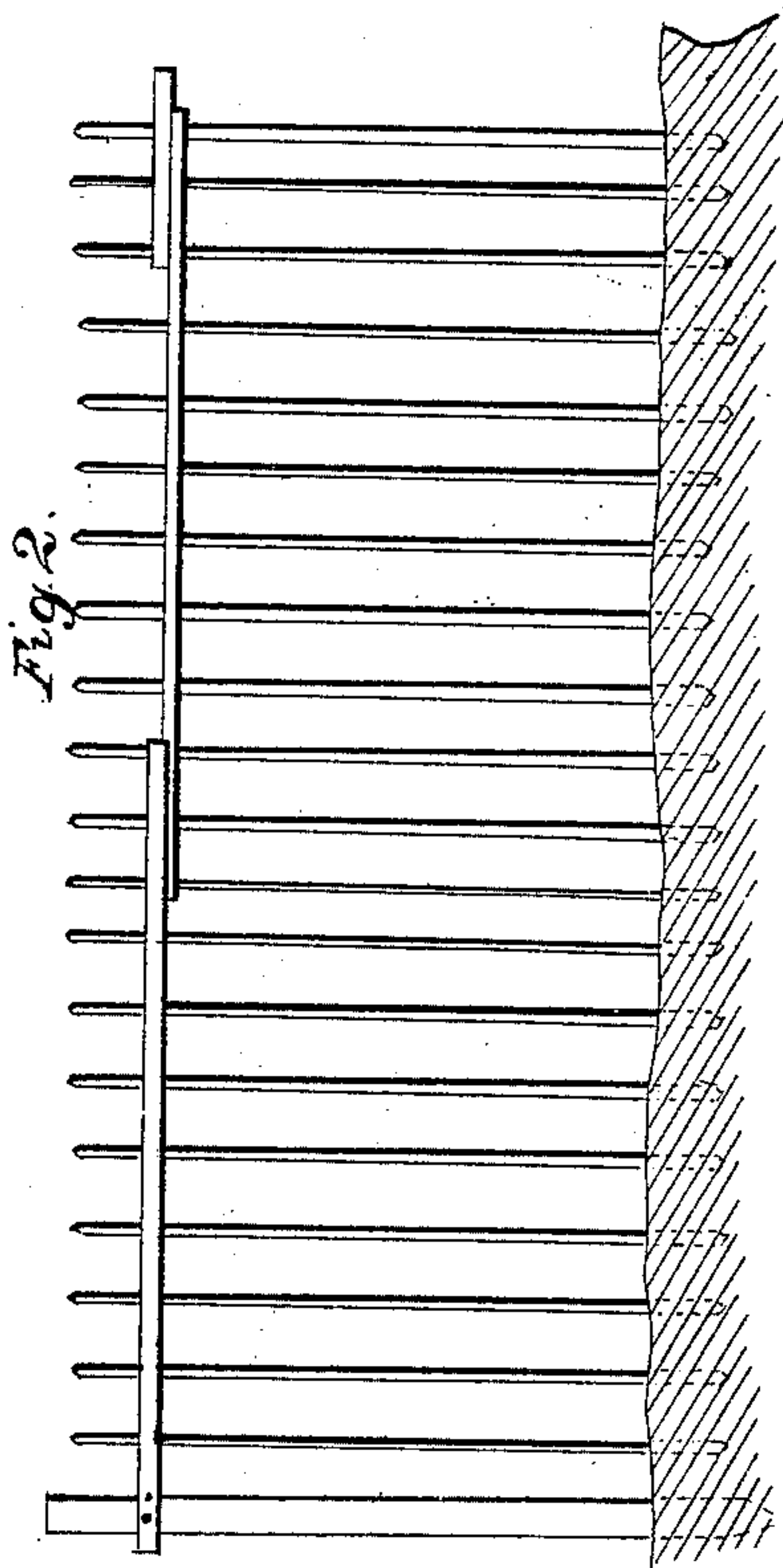
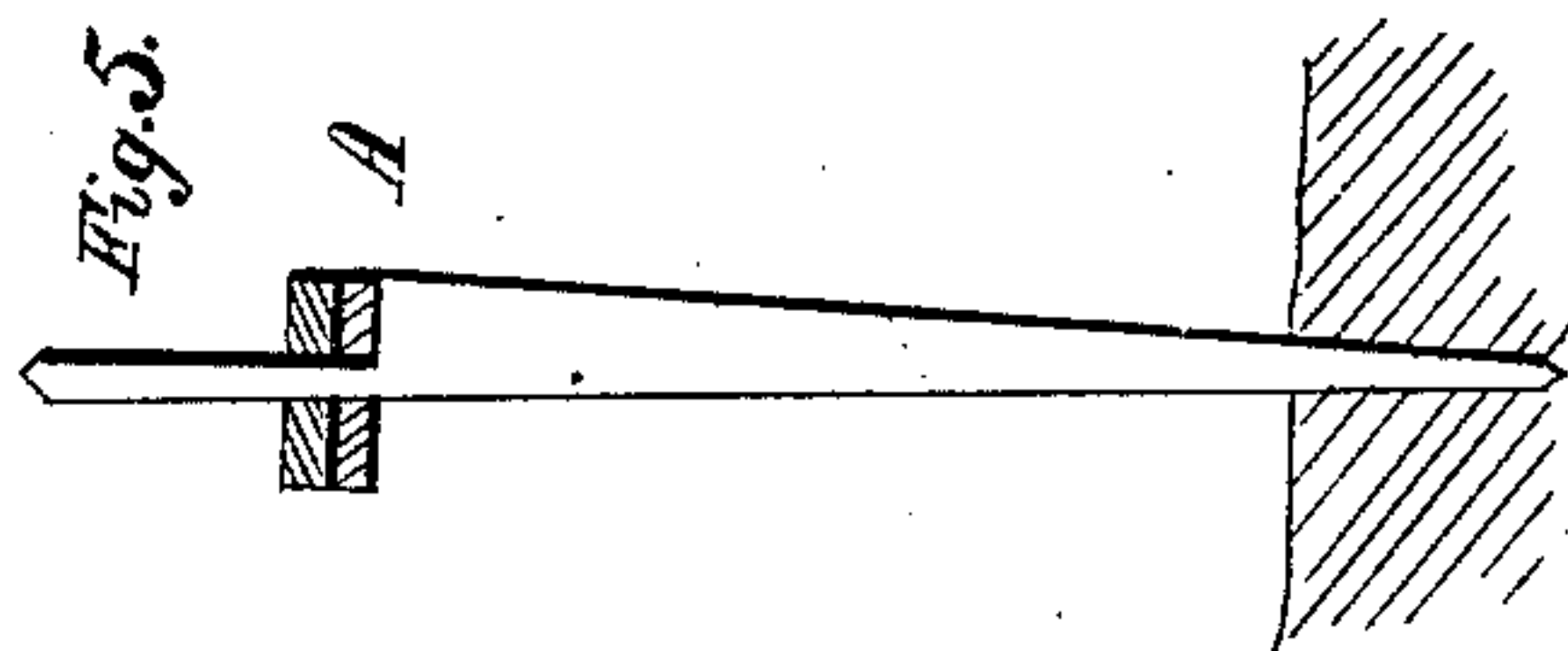
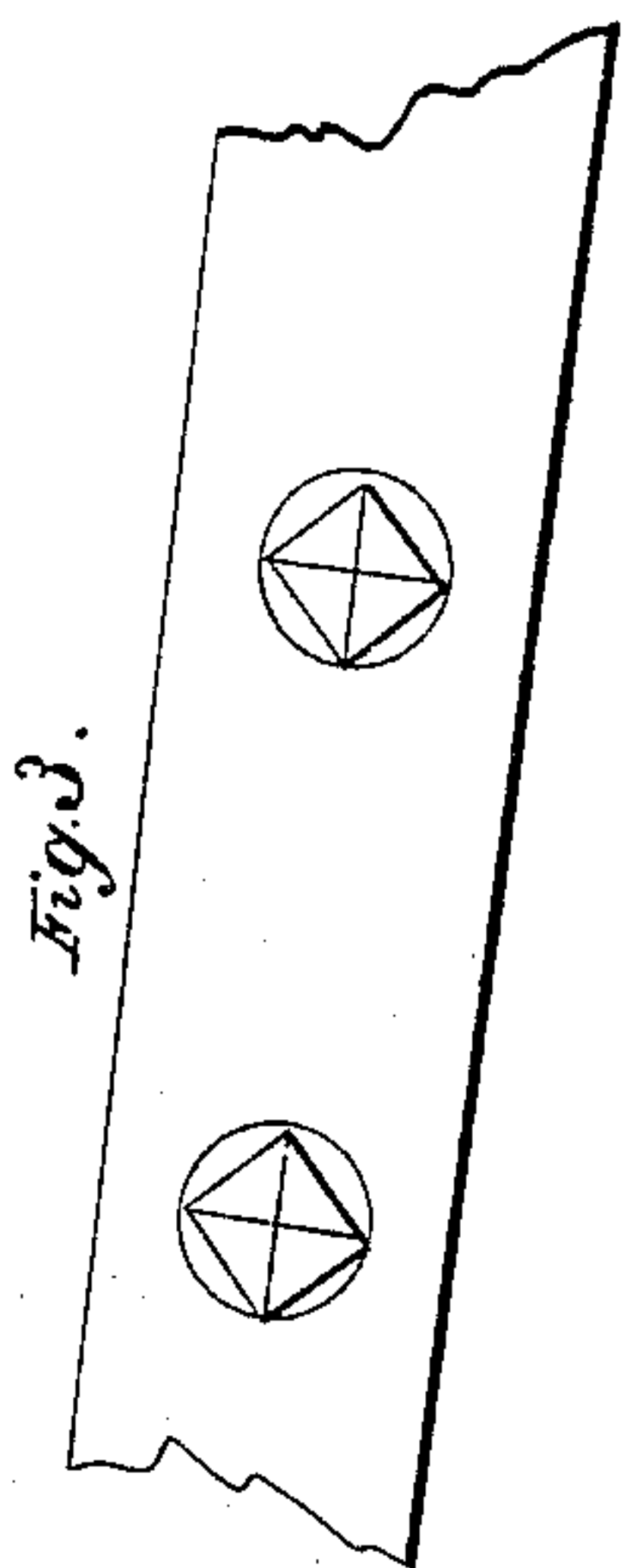
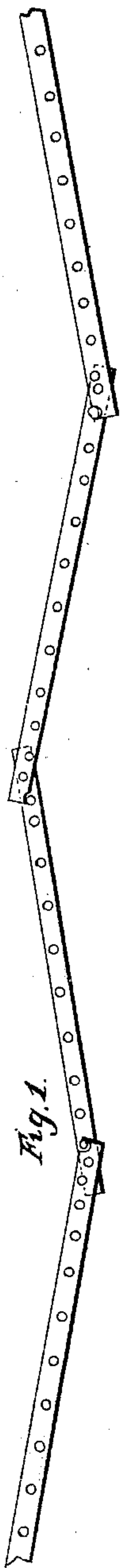


G. W. T. GRANT.

Picket Fence.

No. 31,594.

Patented March 5, 1861.



Witnesses
H. B. Shogren
W. A. Adams

Inventor,
George W. T. Grant
By his Attorney
Chas. L. Watson

UNITED STATES PATENT OFFICE.

GEORGE W. T. GRANT, OF HOMER TOWNSHIP, WINONA COUNTY, MINNESOTA.

PICKET FENCE.

Specification of Letters Patent No. 31,594, dated March 5, 1861.

To all whom it may concern:

Be it known that I, GEORGE W. T. GRANT, of Homer township, in the county of Winona and State of Minnesota, have invented a new and useful Mode of Making a Picket Fence, and one which is especially adapted to a prairie country; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference thereon.

Figure 1 is a horizontal projection of two panels of the fence, as it stands upon the ground. Fig. 2 is a side view of the fence. Fig. 3 shows a cross section of a picket as it passes through the rail. Fig. 4 shows the manner in which the joints of the panels are locked together. Fig. 5 shows the form of the shouldered pickets which support the ends of the rails.

Economy of materials is a matter of very great moment in a prairie country, where timber is generally scarce. It is also of very great importance to so construct a fence, that it shall as far as practicable be free from damage by fires which often prevail in those countries.

My invention has particular reference to both these matters, as well as some others which will be stated below.

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

The fence is composed of pickets sustained in a vertical position by a single rail to each panel, placed at the proper height above the ground to support the top of the pickets. The lower end of the picket is sunk into the earth, to a sufficient depth, to prevent it from being moved laterally by animals or other causes.

The rail I generally make of the thickness of one inch and a quarter, and four or five inches wide. This rail is then perforated with holes, two inches in diameter, passing centrally through the rail and at suitable distances apart, say five or six inches from center to center. The terminal holes should be at least six inches from the respective ends of the rail, for reasons which will appear hereafter.

The pickets are made a full inch and a quarter, or inch and three eighths square, and about six feet long. They will then pass freely through the holes in the rail. Their respective corners are intended barely to

touch the circumference of that hole so as to fit loosely, and not to require to be driven out or in. The rail being supported in the manner hereinafter described at the height of about four feet from the earth the pickets are dropped through the hole in the rail and the lower end is driven into the ground to the depth of about three inches. When they shall finally rot off, at the surface of the earth they can be driven down again, and so on until the rails and the body of the pickets shall finally decay. As there is very little contact of one piece of timber with another, such decay will not take place for many years.

To support the rail at the proper height, I place at each end a picket provided with a shoulder as represented at A, Fig. 5. This picket from the shoulder up is made of the same size as the ordinary pickets, and it answers the same purpose as the other pickets and is driven into the ground, in the first place, and again when it rots off, in the same manner. If the rail is so long as to require support in the center, one of these shouldered pickets is placed there for that purpose. This shouldered picket placed at the end of the rail passes also through the terminal hole in the rail of the next pannel, and thus each two consecutive panels are attached together.

To give the fence strength to stand by itself each panel is placed at a small angle with that which adjoins it at each end. I have ascertained from experiment, that when the panels are each twelve feet in length, a crook of two feet is sufficient for this purpose, that is to say one end of each rail should stand one foot on one side of the central line of the fence, and the other end one foot on the other side of that central line—the slight penetration of the earth by the pickets when arranged as above stated will give the necessary stability. To add to the stiffness of the fence I cause the end of each rail to press hard against the second picket of the rail with which it is connected as is shown at B and C, Fig. 4. This is effected by regulating the distance between the two holes at the end of the rail, or by hewing off a portion of the end of the rail if necessary.

A fence made as above described is much more flexible than though the pickets were driven firmly into the rails. It will readily accommodate itself to uneven surfaces on the ground and the pickets will stand up-

right where the ground is considerably descending.

By making the pickets sufficiently long and placing them more closely together, a fence
5 may be made, which will entirely exclude dogs or wolves from a field. If it is desired to fence against hogs the lower ends of the pickets must be driven more firmly into the earth, or the foot of the pickets may be kept
10 in place by many other contrivances.

If the fence does not close upon itself, a post will be required at each end of the fence, substantially set in the ground, for the end pickets of the fence to be attached to, to give
15 staunchness to the fence.

The fence may be made of materials of greater or less size or length, the angle of the rails may be greater or less, and the pickets driven into the earth to a greater or
20 less depth, without a departure from the principle embraced in my invention.

The leading peculiarities of my fence are, that by dispensing with the lower rail, and posts, it requires less timber than any other
25 fence of equal efficiency, with which I am acquainted, it is less subject to injury or destruction from fire, than though it had a bottom rail. It presents a very small surface to the action of wind, and though seemingly
30 possessed of little stability, is really a very efficient and durable fence. It is repaired with great facility, when out of order from any cause and the pickets being loose in the holes of the rails permit a free circulation

of the air around them which will speedily 35 dry out any moisture, which may collect about them, and thus prevent decay. The speed and facility of constructing the fence out of the prepared materials, its great portability, and ease with which it may be re- 40 moved and reconstructed, when desired, are all apparent from inspection.

I am aware that fences have heretofore been made, by driving square pickets through two rails, so as to make them rigid and un- 45 yielding, and then giving the consecutive panels a sufficient angle with each other, to stand erect without posts, or driving the pickets into the ground. I lay no claim to such a contrivance; but 50

What I do claim as new and desire to secure by Letters Patent is—

The construction of a picket fence with only one rail to the panel having the rails supported on the shouldered pickets and 55 being placed at a sufficient angle with each other consecutively to give the necessary strength to the fence to resist lateral pressure, the pickets fitting loosely in the holes of the rails and the lower ends of the pickets sunk 60 sufficiently into the earth to prevent them from being moved laterally out of place; all in the manner and for the purpose above set forth and described.

GEORGE W. T. GRANT.

Witnesses:

TIMOTHY DAVIS,
JARED BALDWIN.