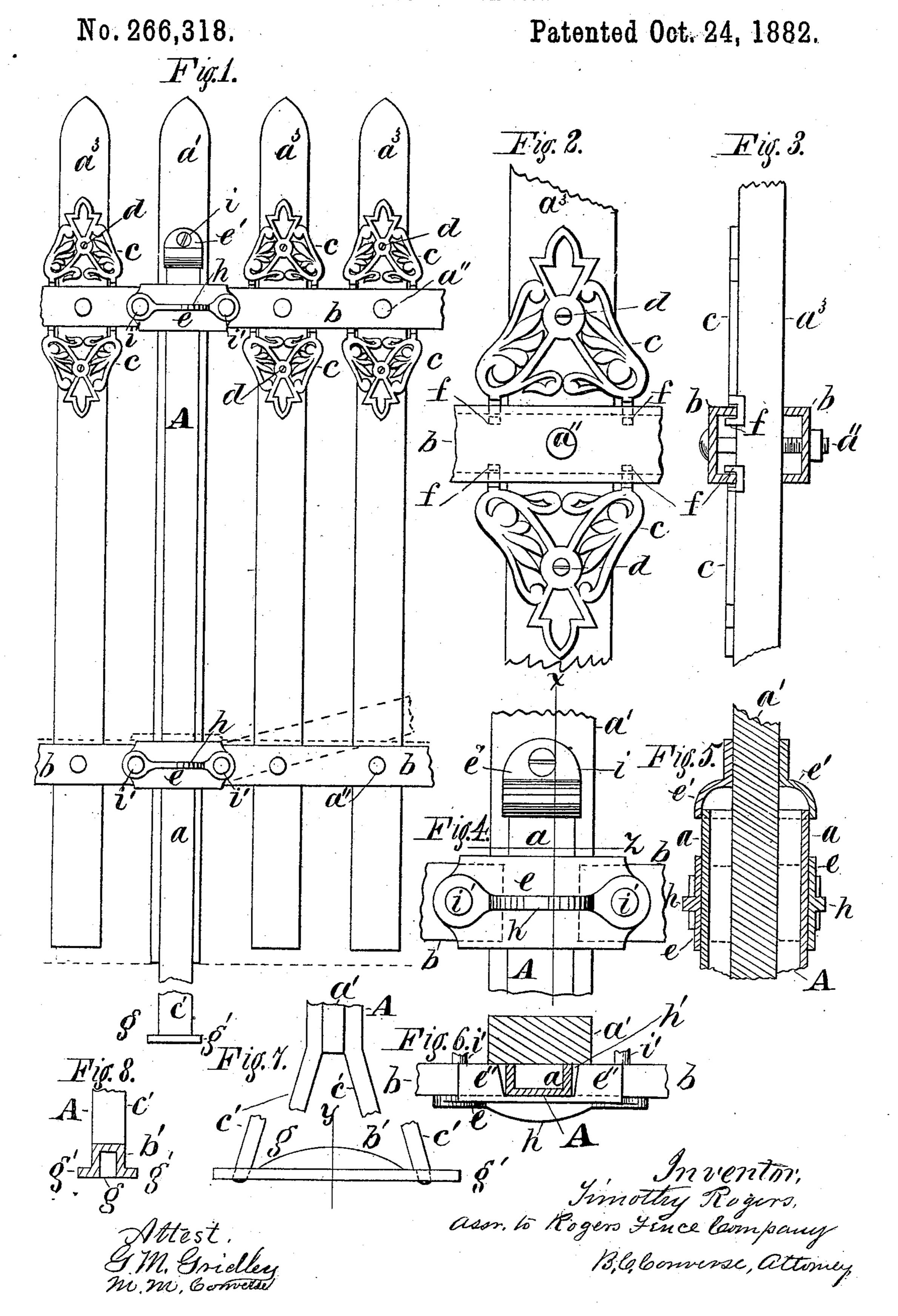
T. ROGERS.

COMPOSITE FENCE.



United States Patent Office.

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COMPOSITE FENCE.

SPECIFICATION forming part of Letters Patent No. 266,318, dated October 24, 1882.

Application filed July 10, 1882. (No model.)

To all whom it may concern:

Be it known that I, TIMOTHY ROGERS, a citizen of the United States, residing at Springfield, in the county of Clarke and State of Ohio, 5 have invented certain new and useful Improvements in Fences; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to certain improvements

15 in fences.

My invention relates, further, to certain improvements in fences which are constructed

partly of wood and partly of iron.

The object of my invention is to simplify the construction of an ornamental fence which shall be permanent and durable, and which shall be cheap as compared to the cost of an iron fence with a like amount of ornamentation thereon.

Another object of my invention is to make the connecting ends of the rails easily adjustable in height upon the post either for straight

or inclined grades.

Another object of my invention is to confine the pickets in such manner as to allow them to be easily replaced when broken, and to allow of a free circulation of air about the points of their attachment to the rails, and to make the contacting-surface of the rail against the picket as small as possible, that the latter may sooner dry out after exposure to wet, and thereby prevent decay.

My invention consists in a fence with its posts and rails (the latter double) of iron and its pickets of wood, that part of the post above ground being composed of both wood and iron.

Figure 1 is a side elevation of a post and part of two panels of my improved fence, the post being broken off below the ground-line.

Fig. 2 is an enlarged view of a portion of a picket, ornaments, and the rail-connection.

Fig. 3 is an edge view of the same. Figs. 4, 5, 6, 7, and 8 are details. Dotted lines, Fig. 1, show the adjustment of rails.

In the drawings, A represents a fence-post,

made of two pieces of channel-rail iron, a, with the hollow of each section turned inward, and a long flat wooden picket, a', interposed between the two sections, which are on the front and rear sides. This picket extends upward 55 from the ground-line, and its top end ranges with the pickets of the connecting-panels. The upright sections a of the post being narrower than the picket, there is sufficient space on either side to allow the ends of the rails b to lie 60 on the picket or rest against it and to abut against the iron section a of the post. A plate, e, having a middle semicircular rib, h, extending lengthwise on the front side to strengthen it, covers the ends of the connecting-rails on 65 both front and rear sides of the post, and bolts i' extend through these plates and the intermediate rail ends, fastening the whole together. Provision is made for the adjustment of the rails and pickets to grade and for the neces- 70 sary expansion and contraction of the rails and their connections.

A cap, e', (seen in Figs. 1, 4, and 5,) covers the top of the post and prevents water from entering the hollow spaces in the same. This 75 cap is segmental in shape, similar in appearance (externally) to one-quarter of a cylinder, with the ends closed, from one side of which extends a flange, i, by which it is attached to the picket a'. This cap fits snugly over 80 the top end of the iron upright of the post upon either side of the picket, as seen in Fig. 5. A screw secures the cap to the picket through the flange, both on the front and rear sides of the picket. The two channel-rail uprights a 85 diverge from the ground-line, forming the limbs c', the ends of which extend through the ends of a base-plate, g. (See Figs. 7 and 8.) This base-plate has horizontal flanges on its sides at the bottom part, and a circular elevated mid- 90 dle part, b', which is hollow, as seen in Fig. 8, which shows a cross-section through line y, Fig. 7. The ends of the limbs c' are riveted at either end of the hollow segment b', as seen in Fig. 7. In this figure the upper and lower por- 95 tions of the base of post A are shown broken asunder. The hollow in the base allows dirt lying loose in the post-hole to be packed therein when the post is set. The pickets a^3 of the panels are secured between two channel-iron 100 rails, with their hollow sides inward, as seen in Fig. 3. A bolt, a'', extends through the rail-sections and intermediate picket.

It will be noticed by referring to Figs. 2 and 5 3 that only the edges of rails b contact with the surface of the picket, leaving a space through the hollow for the air to circulate freely, and thus dry out any moisture where the rail crosses the picket, differing in this respect from either 10 a flat iron or a wooden rail. The ornaments c_{i} above and below the rail, are secured to the picket by a screw, d. They have also rectangular hooks f on either side, which overlap the edges of the picket and extend under the rail-15 flange. In Figs. 2 and 3 the connection of the ornament and rail can be seen. By removing | the ornaments and taking out bolts $a^{\prime\prime}$ a picket can be easily slipped out and removed without disturbing the other members of the fence.

Fig. 4 is an enlarged view of the top part of post A and the connections of the upper rails. Fig. 5 is a vertical section through line x, Fig. 4; and Fig. 6, a cross-section through line z of the same figure, one of the sections a of the post being left out.

The rails and pickets forming the panels may be adjusted up or down upon post A by simply loosening the bolts i'. There is also sufficient space between the flanges e'' to allow of rails b, pivoted upon bolts i', to be inclined to suit the grade. By reference to Fig. 6 it will be noticed that the oblong notch h' is longer than the width of the post-section a, which it spans, to not only facilitate the adjustment of the rail-connections upon the post, but also to allow of the requisite expansion and contraction of the rails and their connections. The finished panels and the posts can be shipped

I am aware that wooden pickets having malleable ornaments are not new; but the use of such pickets and their ornaments has heretotore been limited to their combination with a wooden rail, either singly or with a wooden rail and a wooden band-mold together. A fence of the construction named is not only less durable, but possesses but little strength as compared with my improved composite fence described. Furthermore, the wooden rail is objectionable on account of the greater difficulty in making repairs, particularly when fin-

ished with a band-mold.

I claim as my invention—

1. In a fence constructed with wooden pickets and wrought-iron rails, a post in which a 55 wooden picket is clamped between iron uprights formed of channel-rail, substantially as set forth.

2. In a fence having iron rails and wooden pickets, a post made of two uprights of wrought- 60 iron channel-rail, with an interposed picket of wood between the uprights, the latter diverging from the ground-line downward and riveted to a cast base-plate at their lower ends, substantially as hereinbefore set forth.

3. In a fence-post composed of wood and iron, constructed as described, the cast base having a hollowarched middle partand straight parallel sides, the two channel-rail uprights, and the interposed wooden picket, in combination with the caps for covering the ends of the uprights, having flanges extending therefrom, by which they are attached to said picket, substantially as set forth.

4. A fence in which a series of wooden pick- 75 ets are secured between wrought-iron channel-rails by bolts extending through the rails and interposed picket.

5. The combination, with a post made of two uprights of wrought-iron channel-rail and an 80 interposed picket of wood, of rails the ends of which overlap the front edges of the interposed picket and abut against the iron upright of the post upon either side thereof, and a plate connecting said rail ends, provided with rearwardly-extending flanges resting against the front of the picket thus interposed and upon each edge of the same.

6. In a fence having wrought-iron channel-rails and a post composed of wrought-iron up- 90 rights, with an interposed picket of wood, a series of ornaments having rectangular hooks bent backward over the edges of the intervening picket, downward in line with the same, thence forward into the cavity of the rail and 95 engaging with the flange of the same.

In testimony whereof I affix my signature in presence of two witnesses.

TIMOTHY ROGERS.

Witnesses:
CHAS. D. RUSH,
B. C. CONVERSE.