No. 692,461. Patented Feb. 4, 1902.

F. LICHTFELDT.

FENCE.

(Application filed Sept. 8, 1900.)

(No Model.)

Fig. 2.

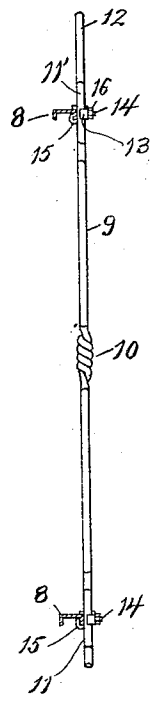


Fig. 1.

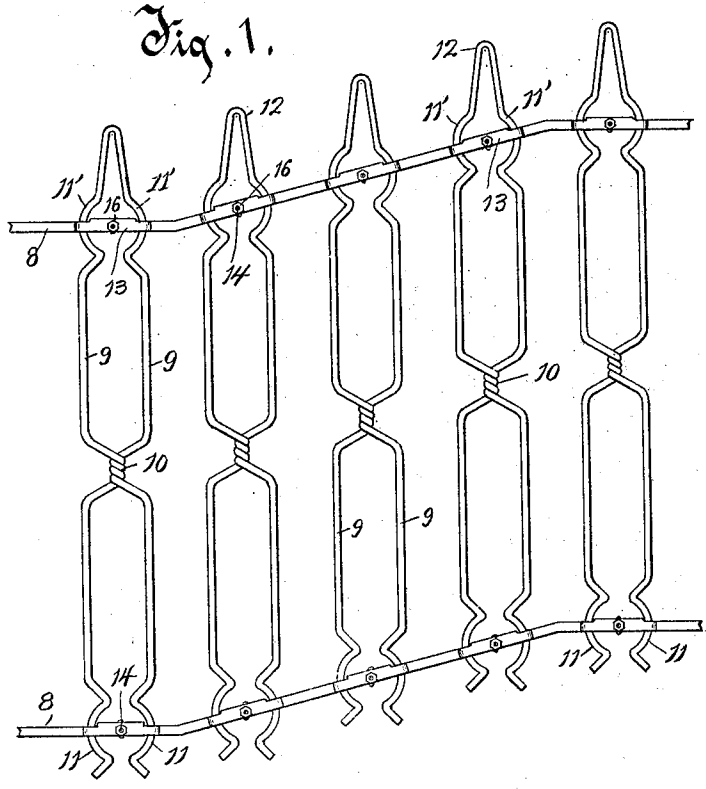


Fig. 4.

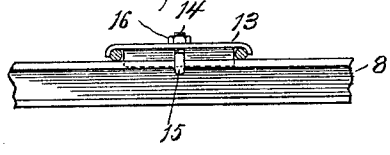


Fig. 3.

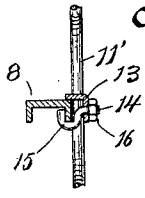


Fig. 5.



Fig. 6.

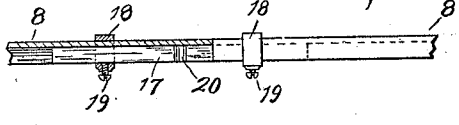
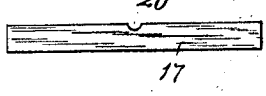


Fig. 7.



Witnesses.

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FREDERICK LICHTFELDT, OF MILWAUKEE, WISCONSIN.

FENCE.

SPECIFICATION forming part of Letters Patent No. 692,461, dated February 4, 1902.

Application filed September 8, 1900. Serial No. 29,359. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK LICHTFELDT, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and useful Improvement in Fences, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

My invention has relation to improvements in fences.

The primary object of the invention is to provide an improved construction whereby the rails are readily adapted to be inclined, so as to render the fence adaptable for hilly or sloping surfaces of the ground.

A further object is to provide an improved fence that is composed of a minimum number of parts, that is simple and comparatively inexpensive in construction, that is adapted to be readily and easily put up by any one with only a few tools commonly in use, that is neat and attractive in appearance, and that is strong and durable in use.

With the above and other incidental objects in view the invention consists of the devices and parts or their equivalents, as hereinafter set forth.

In the accompanying drawings, Figure 1 is an elevation of a fragment of the fence, illustrating the position the rails and pickets assume when the fence is set up in ground which is partially level and partially hilly or sloping. Fig. 2 is a transverse section through the rails looking on the edge of one of the pickets. Fig. 3 is a transverse section through one of the rails and through one of the picket-securing devices. Fig. 4 is an under view of one of the rails and of the picket-securing mechanism, the wires of the picket being shown in section. Fig. 5 is a detail view of the angle-plate forming part of the picket-securing mechanism. Fig. 6 is a detail, partly in section, showing the means for connecting together two abutting ends of rails; and Fig. 7 is a detail of Fig. 6.

I have not shown in the accompanying drawings any particular form of post in connection with my improved fence, it being understood that any desirable form of post best adapted for the purpose may be employed.

The two rails 8 8 of the fence are preferably constructed of channeled steel bars, and these are secured to the posts (not shown) in any desirable manner.

Each picket of my improved fence is constructed of a single integral wire, preferably of steel, and each picket is provided with a body portion of substantially parallel legs 9 9, said legs being advisably and preferably brought together at their centers and may be coiled together at such central portions, as indicated by the numeral 10. The two legs at opposite ends are bent inwardly toward each other, and then each leg is bent and curved outwardly, forming rounded substantially circular heads 11 11′. From the lower rounded portions 11 the legs are again bent outwardly, as clearly shown, while from the upper rounded portions 11′ the wires are extended upwardly and incline toward each other and to the upper bend, thereby forming ornamental tapering extremities or finials 12. The pickets are arranged adjacent to one of the depending side flanges of each channel-rail, and for readily securing these pickets so arranged to the rails I provide short angle-bars 13, so disposed that the upper flange of each angle-bar will overlap the top of a rail. The ends of each angle-bar are curved slightly around the wires of the portions 11 and 11′ of the pickets. For adjustably securing these plates, and thereby adjustably connecting the rails with the pickets, I provide for each angle-bar a bolt 14, which passes through the vertical portion of each angle-bar. One end of each of these bolts is formed with a hook 15, which engages under the adjacent flange of the rail. The opposite end of each bolt is threaded to receive a nut 16, which is adapted to be turned against the angle-bar. When the nut is tightened, it of course has the effect of drawing the picket firmly against the flange of the rail, and thus hold the picket securely but releasably in engagement with the rail. Whenever the nuts are screwed entirely off of the bolts, the picket can of course be readily removed. The rails may be secured in place in horizontal position, as shown by the two end sections of the fence in Fig. 1. Where the fence is to be set upon a hilly or sloping surface, the rails may be secured in inclined positions. To accomplish this, all that is necessary is simply to turn the angle-plates to the desired inclination, as shown by the in-

termediate section of the fence in Fig. 1, the curved ends of the angle-plates of course riding around on the curves 11 or 11′, the nuts being finally turned tightly against the said angle-plates.

The rails 8 8 in the construction of the fence are adapted to abut together end to end and are secured to each other by means of rail-coupling devices consisting of a coupling member 17, which is preferably a short bar of steel, ordinarily about nine or ten inches long, fitted and placed in the channels of the ends of the abutting rails and held thereto by loosely-fitting collars 18 18 about the rail and the member 17 and slidable thereon and provided with holding-screws 19 19, that respectively turn through an enlarged boss-like side of the collar against the member 17, fitting in the channel of the rail and flush with the walls of the channel. These collars are advisably located three or four inches from the ends of the rails, and such members 17 fit snugly into the channels in the rails, the coupling devices holding the rails securely to each other and in position. Where the ends of the rails and the coupling devices meet at a point where the pickets are secured to the rails, it is necessary to provide the coupling member 17, upon the inner side edge thereof, with a recess 20 for the accommodation of the upwardly-extending portion of the hook 15 of the bolt 14.

What I claim as my invention is—

1. The combination of a fence-rail, a picket adjacent to the rail, said picket consisting of two parallel or substantially parallel members, each member having a segmentally-curved portion at or near its end, the said segmentally-curved portions being opposed to each other, and a picket-securing device adjustably secured to the rail and engaging and movable on the segmentally-curved portions of the two members of the picket.

2. The combination of a channeled fence-rail, a picket adjacent to the rail, said picket having a rounded or substantially rounded formation at or near its end, a picket-securing device comprising a bar having its ends engaging the rounded portions of the picket, a bolt passing through the bar and provided with a hook engaging under the flange of the channeled rail, and a nut engaging the bolt and adapted to be turned against the bar.

3. The combination of a channeled fence-rail, a picket adjacent to the rail, said picket consisting of two parallel or substantially parallel members, and said picket having a rounded or substantially rounded formation at or near its end, a picket-securing device comprising an angle-bar extending across the picket at the curved portions thereof, the flange of the bar resting upon the top of the rail, and the ends of said bar engaging the curved portions of the picket, a bolt passing through the bar and provided with a hook engaging under the flange of the channeled rail, and a nut engaging the bolt and adapted to be turned against the bar.

4. The combination of fence-rails, a picket adjacent to the rails, said picket consisting of two parallel or substantially parallel members, each member having segmentally-curved portions at or near opposite ends thereof, the said segmentally-curved portions at each end being opposed to each other, and picket-securing devices adjustably secured to the rails and respectively engaging and movable on the respective segmentally-curved portions of the two members of the picket.

5. A fence-picket constructed of wire, bent so as to form the picket with two legs or members, said legs or members being coiled about each other at a medial point but elsewhere separated from and unconnected with each other, and the legs provided at or near their ends with complementary oppositely-rounded portions.

6. In a fence, the combination of channeled rails abutting each other at their ends, a picket adjacent to the abutting rail ends, said picket having a rounded or substantially rounded formation at or near its end, a picket-securing device comprising a bar and engaging and movable on the rounded portions of the picket, a bolt passing through the bar and provided with a hook engaging the flange of the rail, a nut turning on the bolt against the bar, a strap member fitted in the channels and overlapping the ends of two adjoining rails, said strap provided with a recess to accommodate the hook of the bolt, collars fitted about and movable along on the rails and the strap member, and holding-screws turning in the collars against the strap member.

7. The combination of a fence-rail, a picket adjacent to the rail, said picket comprising two legs or members coiled about each other at a medial point but elsewhere separated from and unconnected with each other, and a clamp engaging opposed untwisted portions of the legs or members of the picket, said clamp having means for adjustably engaging said opposed untwisted portions of the legs or members.

8. The combination of a channeled fence-rail, a picket adjacent to one side of said rail, a clamping-bar engaging the picket, and a bolt passing through the clamping-bar, said bolt having its outer end provided with a hook, the hook receiving therein the edge of one of the downwardly-extending flanges of the channeled rail.

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

FREDERICK LICHTFELDT.

Witnesses:

A. L. MORSELL,

ANNA V. FAUST.