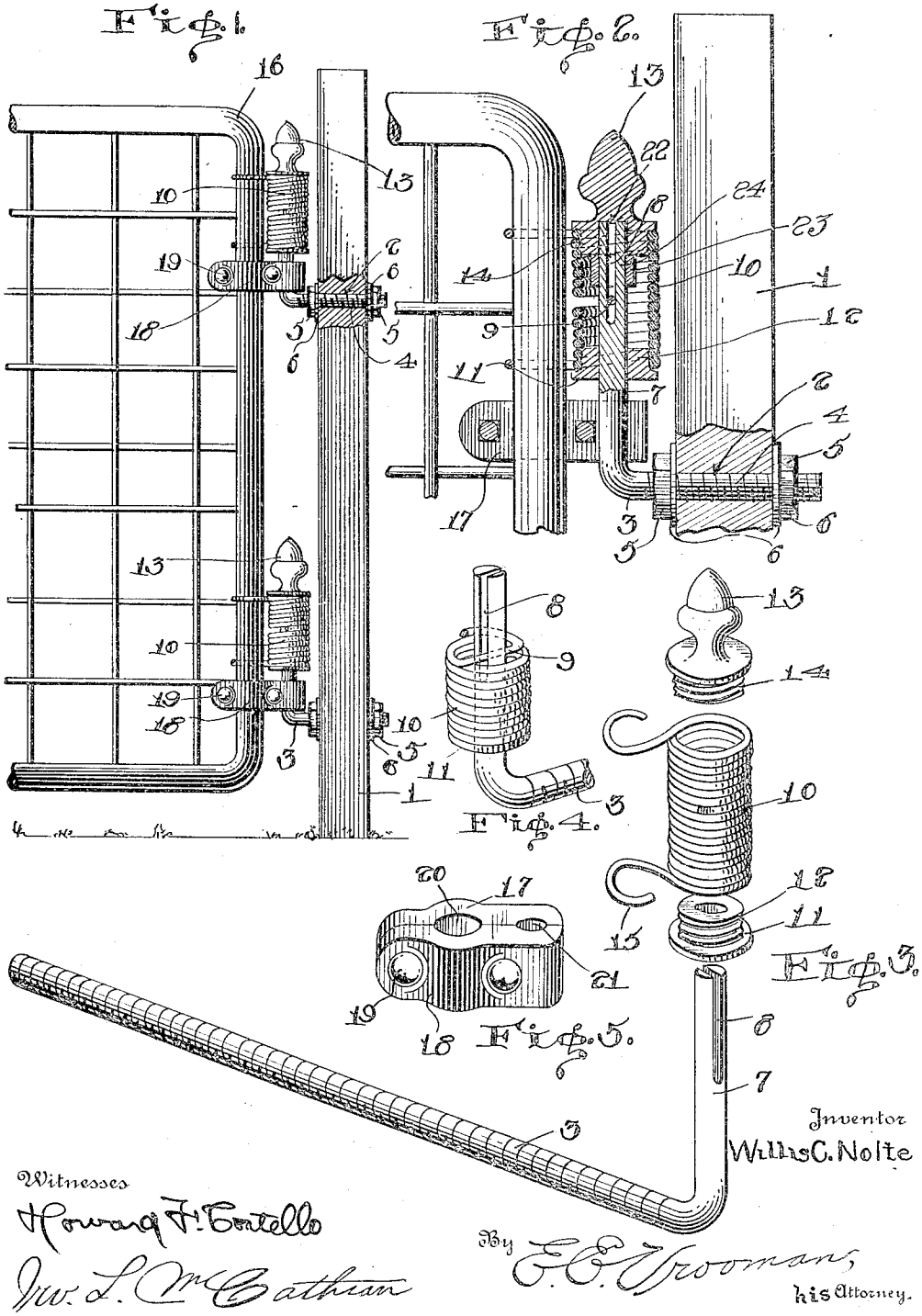
W. C. NOLTE.

GATE HINGE.

APPLICATION FILED OCT. 18, 1913. RENEWED JULY 16, 1914.

1,126,067. Patented Jan. 26, 1915.



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GATE-HINGE.

1,126,067. Specification of Letters Patent. Patented Jan. 26, 1915.

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To all whom it may concern:

Be it known that I, WILLIS C. NOLTE, citizen of the United States, residing at Dazey, in the county of Barnes and State of North Dakota, have invented certain new and useful Improvements in Gate-Hinges, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to hinges especially adapted for gates and the like and has for its object the production of a simple and efficient means for supporting a gate upon a post in such a manner as to hold the gate in a closed position. This is an improvement upon my prior patent bearing Number 1,016,515.

Another object of the invention is the production of a gate hinge which is simple in construction and efficient in operation and consists of a minimum number of parts which parts may be readily assembled.

Other objects and advantages of the present invention will appear throughout the following specification and claims.

In the accompanying drawings:—Figure 1 is a side elevation showing the improved hinge as applied to a gate, portions thereof being broken away and shown in section. Fig. 2 is an enlarged central vertical section through the hinge portion of the gate. Fig. 3 is a perspective view of the several parts of the gate hinge shown drawn apart and ready to be placed upon the supporting pintle. Fig. 4 is a detail perspective view of a portion of the spring used in connection with the hinge showing the manner of supporting the spring in a set position upon the supporting pintle. Fig. 5 is a detail perspective of the securing clamp for attaching the supporting pintle to the frame of the gate.

Referring to the drawings by numerals 1 designates the supporting post which is provided with a plurality of transversely extending apertures 2. Angle supporting pintles 3 have their threaded ends 4 passing through these apertures 2, and upon the threaded ends of the pintle 3 are placed the binding nuts 5, which nuts engage the washer 6 placed upon the opposite side of the post 1 as is clearly illustrated in Figs. 1 and 2.

The vertically extending portion 7 of the pintle 3 is provided with a longitudinally extending slot 8 and within this slot 8 is adapted to fit the transversely extending bridge portion 9 of the coil spring 10. This coil spring 10 is placed over the vertically extending portion 7 of the pintle 3 and the lower end of the spring 10 is threaded upon a supporting base 11, the supporting base 11 being provided with a threaded neck 12 for the purpose of intermeshing with the coils of the spring 10. The bridge portion 9 of the spring is preferably formed intermediate the ends thereof so as to engage the slotted portion 8 of the vertically extending portion 7 of the pintle 3, and a cap 13 is carried by the upper end of the spring 10 by having its threaded portion 14 intermeshing or interlocked with the coils of the spring 10 as is clearly illustrated in Fig. 2.

The terminals of the spring 10 are bent so as to form oppositely curved hooks 15 which hooks engage the frame 16 of the gate as is illustrated in Figs. 1 and 2, whereby the springs 10 will normally hold the gate 16 in a closed position.

A connecting clamping member as is clearly illustrated in detail in Fig. 5 is adapted to engage the vertically extending portion 7 of the pintle 3 for supporting the same in engagement with the frame 16 of the gate. This clamp comprises a primary section 17 and an auxiliary section 18, which sections are connected together by means of the transversely extending bolts 19. Each section of the clamp is provided with an enlarged socket portion 20 adapted to fit over the vertically extending portion of the gate 16, and these socket portions of the respective sections register so as to constitute a substantially circular aperture for receiving the gate frame. Sockets 21 similar to the sockets 20 are also formed near the outer end of the clamp for the purpose of engaging the vertically extending portion 7 of the pintle 3.

From the foregoing description it will be seen that a very simple and efficient construction has been produced for supporting a gate in engagement with the supporting post in such a manner as to hold the gate in a closed position.

The cap 13 is provided upon its under surface with a socket 22 which socket 22 is adapted to receive the upper split end of the vertically extending portion 7 of the pintle 3 and thereby firmly hold the entire hinge in engagement with the vertically extending portion 7 in conjunction with the

transversely extending portion 9 of the spring 10 and the base 11 above described.

A collar 23 is placed over the split end of the bolt 3 so as to hold the jaws 24 of the split end of the bolt 3 tightly in engagement with the transversely extending bridge portion 9 of the spring 10. After the collar 23 is placed over the split end of the bolt 3 the cap 13 is placed in position upon the upper end of the bolt as clearly illustrated in Fig. 2.

Having thus described the invention what is claimed, as new, is:—

1. A spring hinge comprising a pintle, means for supporting said pintle in engagement with a support, a spring mounted upon said pintle and provided with means for engaging the same whereby said spring will be held against independent rotary movement upon said pintle, and means threaded upon the respective ends of said spring and engaging said pintle for preventing said spring from being accidentally removed from said pintle.

2. A spring hinge comprising a supporting pintle, said pintle provided with a longitudinally extending groove, a spring provided with a centrally located transversely extending bridge portion fitting in said groove, and means engaging the respective ends of said spring for holding the same from accidental removal from said pintle.

3. A spring hinge comprising a pintle, means for supporting said pintle, a spring mounted upon said pintle, said pintle provided with a vertically extending slot, said spring provided with a bridge portion fitting in said slot formed in said pintle, a collar positioned over the upper end of said bolt and adapted to hold the split end of said bolt tightly in engagement with said bridge portion of said spring, and a cap threaded upon the upper end of said spring and fitting upon the upper end of said pintle for holding said spring against accidental removal from said pintle.

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

WILLIS C. NOLTE.

Witnesses:

C. O. JACOBSON,

L. HILMO.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."