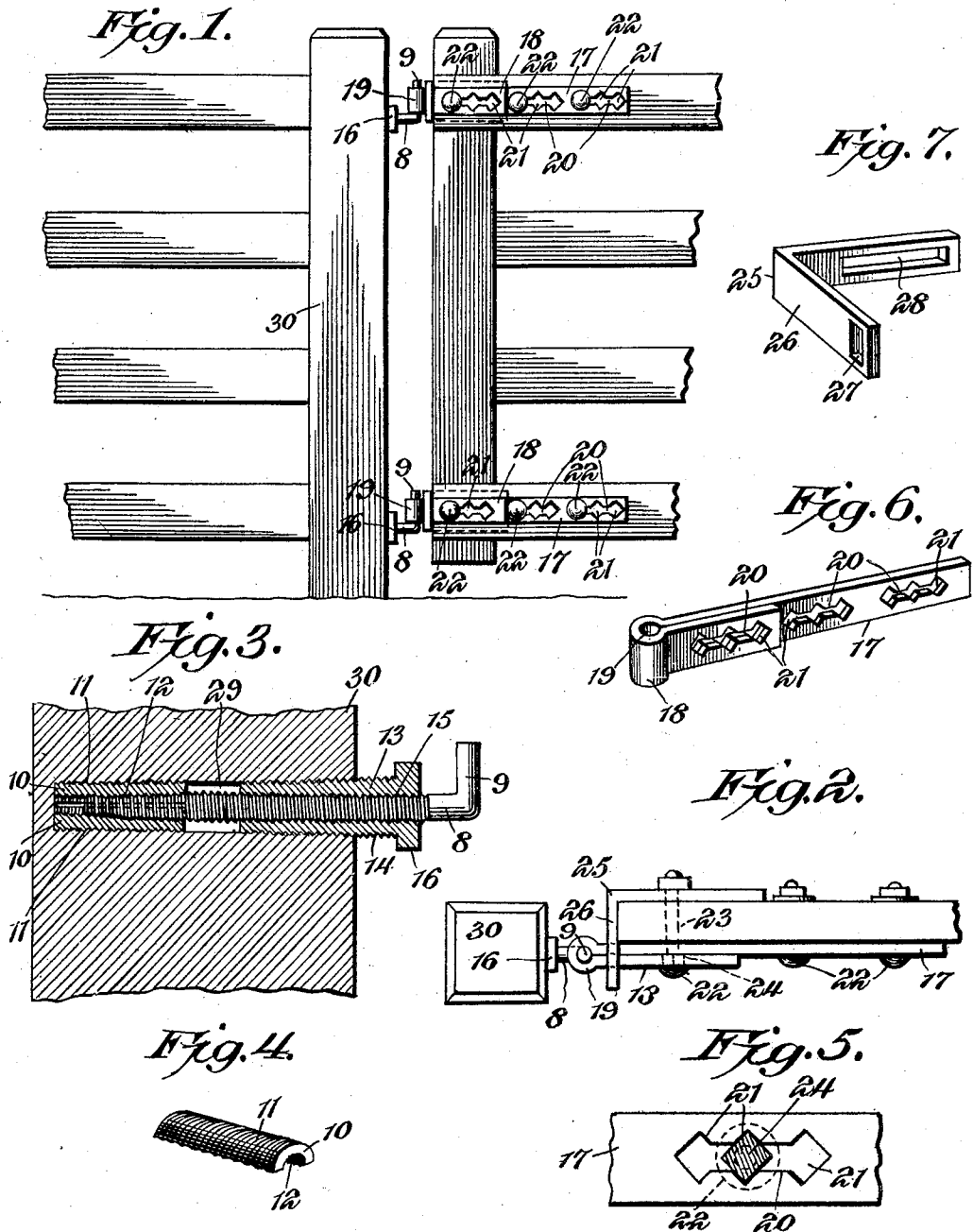


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T. MONSON.
GATE HINGE.

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UNITED STATES PATENT OFFICE.

THOMAS MONSON, OF CYNTHIANA, KENTUCKY.

GATE-HINGE.

No. 880,902.

Specification of Letters Patent.

Patented March 3, 1908.

Application filed November 27, 1906. Serial No. 345,288.

To all whom it may concern:

Be it known that I, THOMAS MONSON, a citizen of the United States, residing at Cynthiana, in the county of Harrison and State of Kentucky, have invented a new and useful Gate-Hinge, of which the following is a specification.

This invention relates to improvements in gate hinges.

One of the primary objects is to provide a post-engaging hinge member that can be readily and effectively fastened in place, is easily adjustable, is not liable to become broken and yet, if broken or injured, can be removed, avoiding the necessity of placing a new hinge in a different position on the gate.

Another object is to provide a simple hinge that will permit the ready readjustment of the gate in case the same becomes sagged or out of place from any cause, said readjustment being accomplished without the necessity of detaching the hinges from the gate.

The preferred embodiment of the invention is illustrated in the accompanying drawings, wherein

Figure 1 is a side elevation of a portion of a gate and a gate-post, the former being supported on the latter by the novel hinges; Fig. 2 is a top plan view of the structure; Fig. 3 is a vertical sectional view through a portion of the post showing the anchor for the pintle member in section; Fig. 4 is a detail perspective view of one of the sections of the anchor element; Fig. 5 is a detail view showing a portion of the strap member, the fastener bolt being illustrated in section; Fig. 6 is a detail perspective view of the strap member; Fig. 7 is a detail perspective view of the keeper employed on the heavier class of gates.

Similar reference numerals relate to similar parts throughout the different figures of the drawings.

In the embodiment illustrated, a hinge member is employed comprising a threaded shank 8 having an up-standing pintle 9 at its upper end. Associated with the shank is an anchor element composed of cylindrical sections 10 having their exteriors suitably roughened, preferably by annular ridges 11, and having an interior tapered bore 12 which is threaded. A plug 13 is employed that is tapered and exteriorly screw-threaded, as shown at 14, said plug having an interior threaded bore 15 and furthermore having at

one end an angular head 16. The strap member associated with said pintle member consists of a strap 17 having one end doubled and looped as shown at 18 to provide an eye 19. The strap is furthermore provided with a series of longitudinal slots 20, one of said slots being formed through the doubled portion. These slots each have a series of spaced and preferably angular sockets 21 that are of greater size than the slots. Fasteners in the form of bolts 22 pass through the slots, these bolts having shanks 23 of small enough diameter to pass longitudinally through the slots from one socket to the next, said shanks having enlarged angular portions 24 that fit snugly in the sockets and are of too great diameter to pass through the slots from one socket to the next. With the heavier type of gates, a keeper is preferably employed comprising an angle iron 25, one arm 26 of which is provided with an opening 27 that receives the doubled portion of the strap, the other arm having a slot 28 that alines with the first slot of the strap and is adapted to receive the bolt which passes through said slot.

A pair of the above-described hinges is employed for each gate and in placing the same in position, holes 29 are bored in the gate-post 30. The anchor elements are placed in the inner ends of these holes, the plugs are introduced into the outer ends of the same, and the pintle shanks are then passed through the plugs and screwed into the anchor elements. This causes the separation of the sections of said elements and forces the roughened outer faces into interlocking contact with the walls of the holes. After the pintles 9 have been properly positioned, the plugs are screwed up until they properly bind in the holes. The strap members are secured, as clearly shown in Figs. 1, 2 and 5 of the drawings; that is to say, they are placed against the gate and the bolts are passed through the slots, the enlarged portions of the shanks being located in the first sockets. For the heavier gates the keepers are employed, said keepers engaging the opposite sides of the gate to the straps. When the parts are thus positioned, the eyes are placed upon the pintles and the gate is hung. In case the gate sags, all that is necessary to raise it is to loosen the bolts of one or the other of the hinges until the smaller portions of the shanks are engaged in the slots, whereupon the gate can be vertically adjusted and

the bolts placed with the enlarged portions in different sockets. Furthermore, the pintles can be readily adjusted, and in case the post rots around the plugs, said plugs can be 5 readily screwed farther in in order to secure a firmer support; also if the pintles become broken, they can be readily removed and new ones placed in position in the former holes.

Having thus described my invention, what 10 I claim as new and desire to secure by Letters Patent, is:—

1. A gate hinge comprising pivotally connected members, one of said members being composed of a threaded shank, and a plug 15 adjustably screwed upon the shank, said plug being exteriorly threaded to screw into a post or support and having means at its outer end for engagement with an operating tool.

2. A gate hinge comprising a strap member having an eye, and a pintle member having a pintle that engages in the eye, said pintle member including an anchor element composed of separable sections having a 20 threaded bore, a plug having an angular head at its outer end, said plug having a threaded bore and a tapered threaded exterior, and a shank carrying said pintle and

threaded through the bore of the plug, said shank having a tapered inner end that is 30 threaded into the bore of the anchor element.

3. A gate hinge comprising pivotally associated members, one of said members being composed of a strap having a doubled 35 end forming an eye in which the other member is engaged, said strap and doubled end having a plurality of longitudinal slots provided with angular openings, and bolts passing through the slots and having heads located against the outer face of the strap, said bolts having shanks passing through the slots and of small enough diameter to move longitudinally in said slots from socket to 40 socket, the bolts furthermore having angular enlargements disposed between the shanks and heads and fitting snugly in the sockets, being of too great size to pass longitudinally in the slots from socket to socket.

In testimony, that I claim the foregoing as 50 my own, I have hereto affixed my signature in the presence of two witnesses.

THOMAS MONSON.

Witnesses:

H. K. TAYLOR,
JAS. M. RANKIN.