No. 889,471. PATENTED JUNE 2, 1908.

G. MACKAY.

RAILWAY RAIL FASTENING DEVICE.

APPLICATION FILED JUNE 19, 1907.

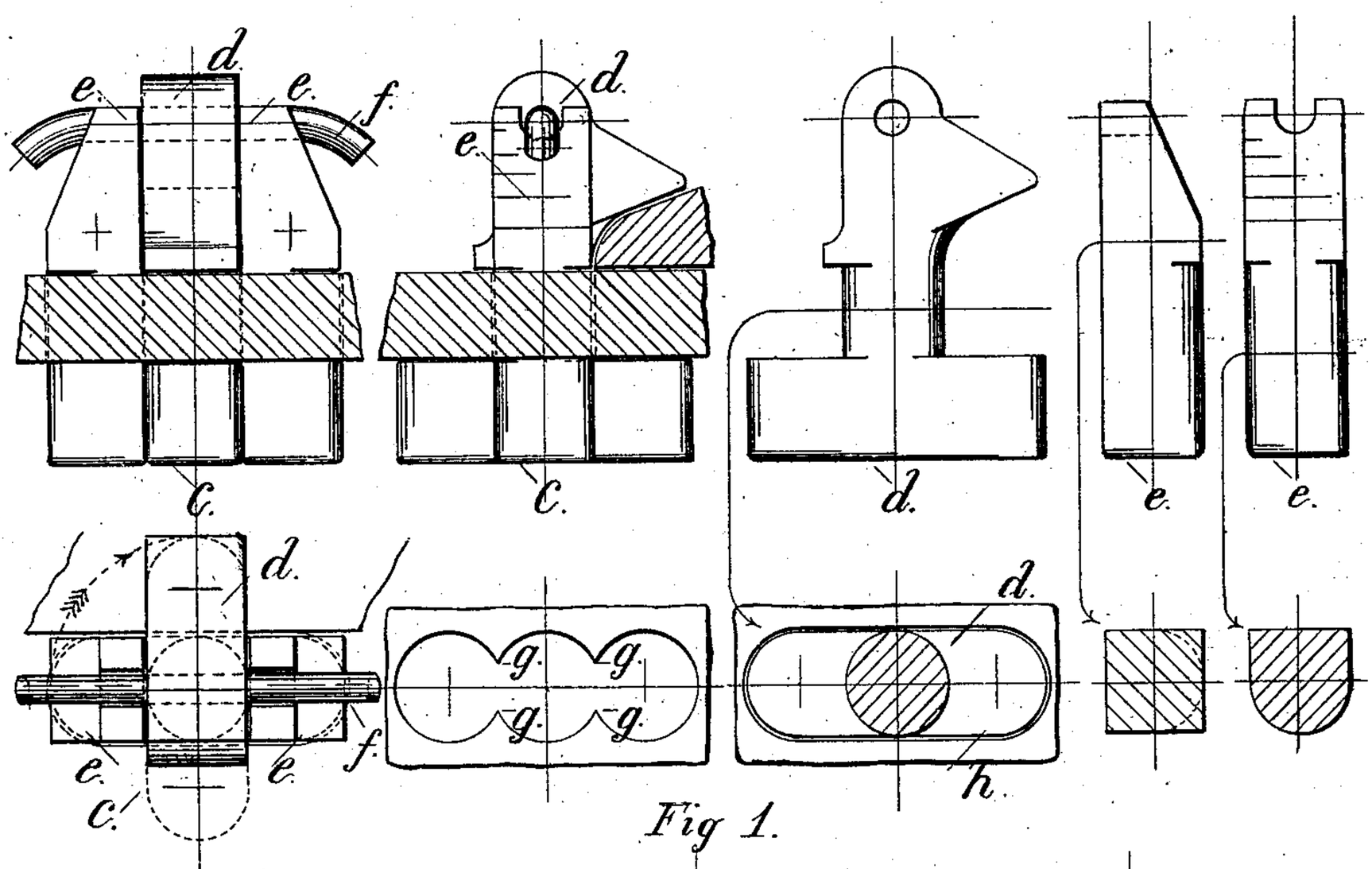

Fig 1.

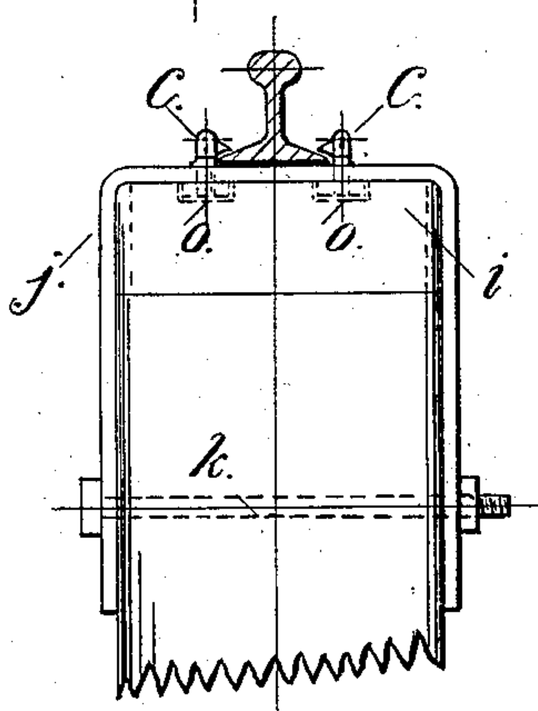

Fig 2.

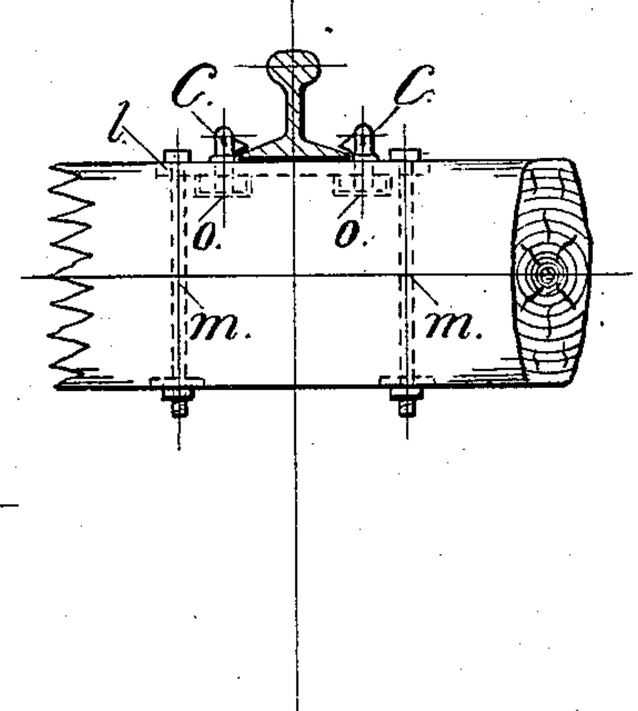

Fig 3.

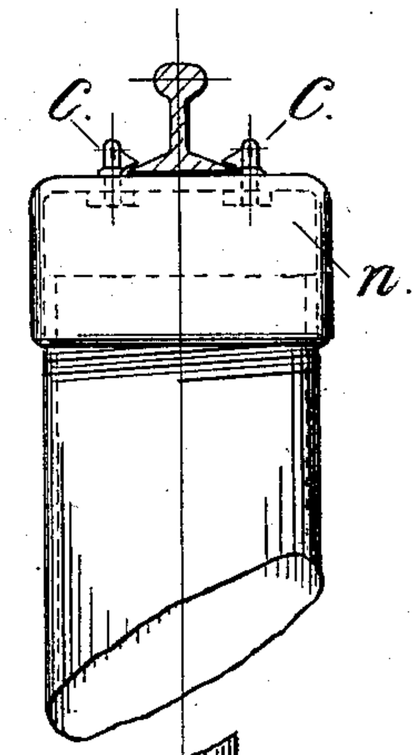

Fig 4.

Witnesses

Wm. A. Johnson

Frank L. Dibbets

Inventor

George Mackay.

UNITED STATES PATENT OFFICE.

GEORGE MACKAY, OF WASHINGTON, DISTRICT OF COLUMBIA.

RAILWAY-RAIL-FASTENING DEVICE.

No. 889,471. Specification of Letters Patent. Patented June 2, 1908.

Application filed June 19, 1907. Serial No. 379,717.

To all whom it may concern:

Be it known that I, GEORGE MACKAY, a citizen of the United States, residing at the Ebbitt House, city of Washington, District of Columbia, have invented a new Metal Railway-Rail-Fastening Device for Securing Rails to Ties or Piles, of which the following is a specification.

My invention relates to a rail-fastening and it acts in conjunction with a holder in ties and piles and the objects of my invention are; first, to hold the rail true to gage against "gage concussion"; second, to be safe, durable and dependable; third, to admit of quick placing and displacing; fourth, to prevent shearing or upsetting; fifth, to perform the office of a spike; sixth, to apply to wood or metal; seventh, to be capable of variations in size. I attain these objects by the rail-fastening illustrated in the accompanying drawings, in which:

Figure 1, shows front view, side view, plan and details of the rail-fastening with views of holder; Figs. 2, 3—4, are each a plan and elevation, showing the rail-fastening applied to a timber pile, a timber tie and a metal pile.

Similar letters refer to similar parts throughout the several views.

Fig. 1, shows the holder *h*, having an aperture with parallel sides and semi-circular ends to which the rail-fastening C, is attached. The rail-fastening C, comprises a round shank with a hook head *d*, for engaging over the rail base, and an elongated base adapted to be passed through the slot or opening in the holding plate *h*, and turned 90°, by which it is locked in the holding plate. At each side of the shank is placed a keeper *e*, to prevent the rail-fastening from turning. Each keeper is a vertical pin flat next to *d*, the lower part being half-round above that square which makes a stop on the curved side of the pin at the ends of holder *h*, the outer sides of the upper parts being beveled and at the tops having a half-round notch for the rider *f*, the latter being a round pin that passes through the head of *d*, takes the notches in *e*—*e*, and by bending down the ends secures the parts. To apply C, an aperture is made in the engaging plate by drilling three contiguous holes with alined centers and removing the curved points *g*, *g*, *g*—*g*, then by inserting *d*, and giving it a quarter turn the hook engages the rail and the double hooks the engaging plate, the keepers *e*—*e*, are slipped in at the sides of *d*, the rider *f*, placed in its seat and the ends of the rider are bent down. To release C, straighten an end of rider *f*, draw out the pin and reverse the operation.

Fig. 2, shows the rail fastening C, applied to a timber pile; *i*, is a pile-band, *j*, is a U-strap with engaging opening. The U-strap is secured to the pile by a through-bolt *k*, and mortises *o*—*o*, are made with an auger to receive the bottom of C, below the plate.

Fig. 3, shows the rail-fastening C, applied to a timber tie; 1, is the holder plate which may or may not be countersunk and is held by bolts *m*—*m*, mortises *o*—*o*, receiving C, below the plate.

Fig. 4, shows the rail-fastening C, applied to a metal pile, engaging the cap *n*.

What I claim as my invention and desire to secure by Letters Patent, is:

A rail-fastening device comprising a holding plate, a detachable rail engaging member fitted therein and provided with an aperture in the upper portion, keepers for securing said member in the plate, and a securing key in said aperture and engaging the keepers.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE MACKAY.

Witnesses:

F. R. HARRIS,

WM. M. SMITH.