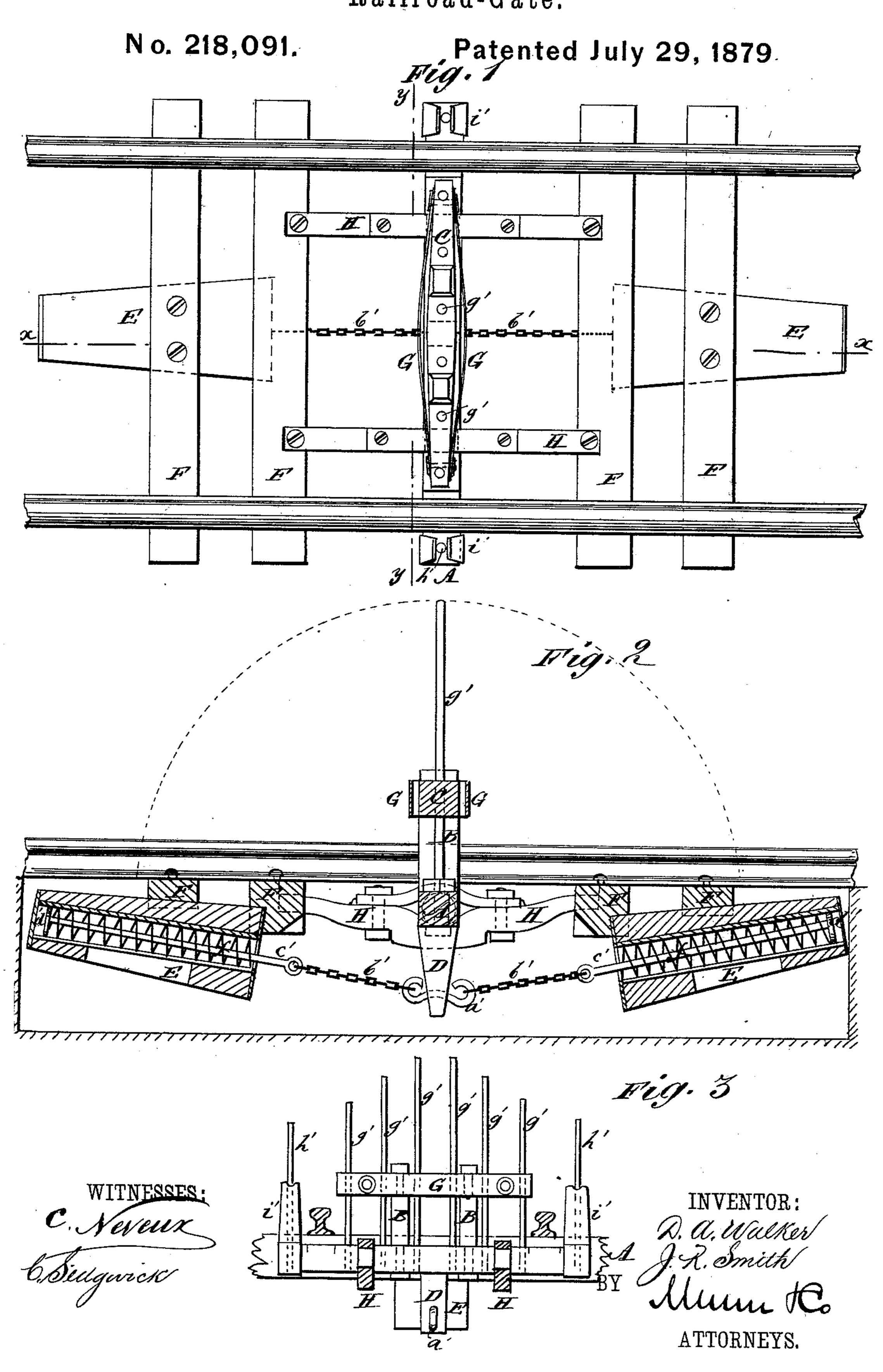
D. A. WALKER & J. R. SMITH.
Railroad-Gate.



UNITED STATES PATENT OFFICE.

DAVID A. WALKER AND JOHN R. SMITH, OF FORT BENTON, MONTANA TERRITORY.

IMPROVEMENT IN RAILROAD-GATES.

Specification forming part of Letters Patent No. 218,091, dated July 29, 1879; application filed May 13, 1879.

To all whom it may concern:

Be it known that we, DAVID A. WALKER and John R. Smith, of Fort Benton, in the county of Choteau and Territory of Montana, have invented a new and Improved Railroad-Gate, of which the following is a specification.

Figure 1 is a plan of the gate. Fig. 2 is a sectional elevation on line xx. Fig. 3 is a section on line y y.

Similar letters of reference indicate corre-

sponding parts.

The object of this invention is to provide an improved swinging gate that is to be placed across a railroad-track to keep cattle and other animals off—a gate that is to be opened by the contact of the pilot or cow-catcher of the locomotive, and that will close automatically immediately after the passage of the train.

The gate is composed of a heavy iron or timber beam, A, into the central section of which are mortised the two standards B B, that are securely held at their upper ends by being mortised into the cross-beam C, which is short enough to swing between the rails of the track.

Projecting downward from the center of the main beam A is the tongue D, a short stout beam that is mortised into A between the standards BB. Through the lower end of this tongue and parallel with the rails passes the double hook a', to each end of which are secured the chains b' b', that in turn connect with the rods c' c', that are provided with disks d' d' on their free ends, and that are held in the boxes E E, that are secured to the under sides of the contiguous ties F F. The ends of these boxes are closed by metallic plates, the two inward ones of which are vertically slotted to permit the free movement of the rods c' c'. Coiled around these rods within the boxes are the spiral springs ff, that hold them in position and the gate upright.

With ends secured in sockets in the upper face of the beam A are a number of iron rods, g' g', that project upward for some distance through holes in the cross-beam C, while the vertical rods h' h' in the ends of the beam

outside of the rails are protected and held in position by the plates i' i', that are bent around and secured to the ends of the beam. Riveted or bolted through their ends to each face of the cross-beam are the flat springs G G, placed there to receive the shock of con-

tact from the approaching engine.

Proper journals or bearings are turned on the beam A, and at these points it is secured and rests, so that the structure can rock back and forth on the stretchers HH, that are arranged parallel with the rails, and are secured at their ends on heavy cross-ties. Thus when this gate is in position its main beam A extends under and a little beyond the rails on each side. The tongue D, with its special attachments, projects downward into a space cleared to admit of its free movement, and the rest of the structure rises above the rails sufficiently to prevent the passage of cattle or the like.

When the gate is struck by the engine it is thrown down in a nearly horizontal position and remains so from the continuous pressure of the cars until the train has passed; then it resumes its upright position through the action of one of the spiral springs ff.

Having thus described our invention, we claim as new and desire to secure by Letters

Patent—

1. The within-described railroad-gate, consisting of main beam A, standards B B, crossbeam C, tongue D, with hook a', chains b' b', and rods c' c', boxes E E, spiral springs ff, rods g'g' and h'h', plates i'i', flat springs G.G. and stretchers HH, constructed and arranged substantially as herein shown and described.

2. In the construction of a railroad-gate, the tongue D, hook a', chains b' b', rods c' c', spiral springs ff, and boxes EE, in combination with the main beam A, substantially as

herein shown and described.

DAVID AMERICUS WALKER. JOHN R. SMITH.

Witnesses:

JAS. T. STANFORD, W. P. WREN.