No. 14,689.

J. F. DOWNING. Gate.

Patented April 15, 1856.







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N. PETERS. Photo-Lithographer, Washington, D. C.

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UNITED STATES PATENT OFFICE.

J. FRANCIS DOWNING, OF ERIE, PENNSYLVANIA.

METHOD OF HANGING AND ELEVATING OR DEPRESSING FARM-GATES.

Specification of Letters Patent No. 14,689, dated April 15, 1856.

To all whom it may concern:

Be it known that I, J. FRANCIS DOWNING, of the city of Erie, county of Erie, and State of Pennsylvania, have invented a new 5 and Improved Mode of Hanging and Elevating Farm-Gates; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the let-10 ters of reference marked thereon.

The nature of my invention consists, first, in hanging the gate, (which may be constructed in any of the known forms,) with a new and improved hinge, as partly de-15 scribed in the accompanying drawing A.

One part of the hinge, D, (which I do not claim as original with me,) I make of round iron of suitable size, and secure to the large post C, as represented in the drawings \overline{A} . 20 The other part of the hinge—the part which I claim as my invention, and wish to secure by Letters Patent, the right to the exclusive use of—I construct as shown in the accompanying drawing B. E. E', I generally 25 make of wrought iron, and in the opening F, F' I put a small wheel with a groove, so as to form two circular openings I, I', intended for the reception of the part of the hinge D, as shown in the drawing A. 30 This part of the hinge E, E', I secure to the back stile of the gate, and being properly adjusted to the other part of the hinge, the gate may be raised and lowered, the grooved wheel G, running up and down on 35 the rod or part of the hinge D, D'. The object in constructing the part of the hinge E, E', as represented, with a grooved wheel to run on the rod D, is to avoid friction in raising and lowering the gate. 40 The nature of my invention further and chiefly consists, in attaching to the gate one (or more) simple levers, as shown at K, K', in the accompanying drawing A, by means of which the whole gate may be easily ele-

vated and sustained at any required height, 45 and lowered at pleasure. To form a fulcrum, I attach one end of an iron-rod to a staple secured in the large post C, at any convenient point, as at M, and the other end I attach to the lever at any point be- 50 tween N, when the lever is attached to the gate, and O, where the power is applied. By depressing the long arm of the lever at O, the whole gate is made to rise. The small pins b, b, b, b, are used to secure or 55 keep the lever in its desired place.

There are two points at which the gate may be raised—N, and R. When the lever is applied to the upper point N, and the long arm is carried to the lowest pin b, the 60 gate may be secured in its position by means of the large pin P, running through the large part C, and by putting the short arm of the lever under the lower pin R, the gate may be raised still higher. 65

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

1. The part of the hinge E, E', (if it be patentable,) and the application of the lever as a means of elevating and lowering the 70 gate, including the manner of obtaining the fulcrum, or point of purchase, by attaching a rod to any convenient point on the large post C.

2. The utility of constructing a gate ac- 75 cording to the plan which I have described, is to avoid the difficulty of snow-drifts and other obstructions, which frequently render other kinds of gates inoperative or inconvenient. By raising this gate by means of 80 the lever, it will swing over snow, ice, and other obstructions, making it especially convenient to farmers.

J. FRANCIS DOWNING.

Witnesses:

JAS. H. GRISWOLD, ALLEN A. CRAIG.