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PATENTED AUG 1 1871

Charles Clapp,

Assn. to

Erastus C. Gregg & Chauncey P. Gregg,

Improvement in Harvesters.

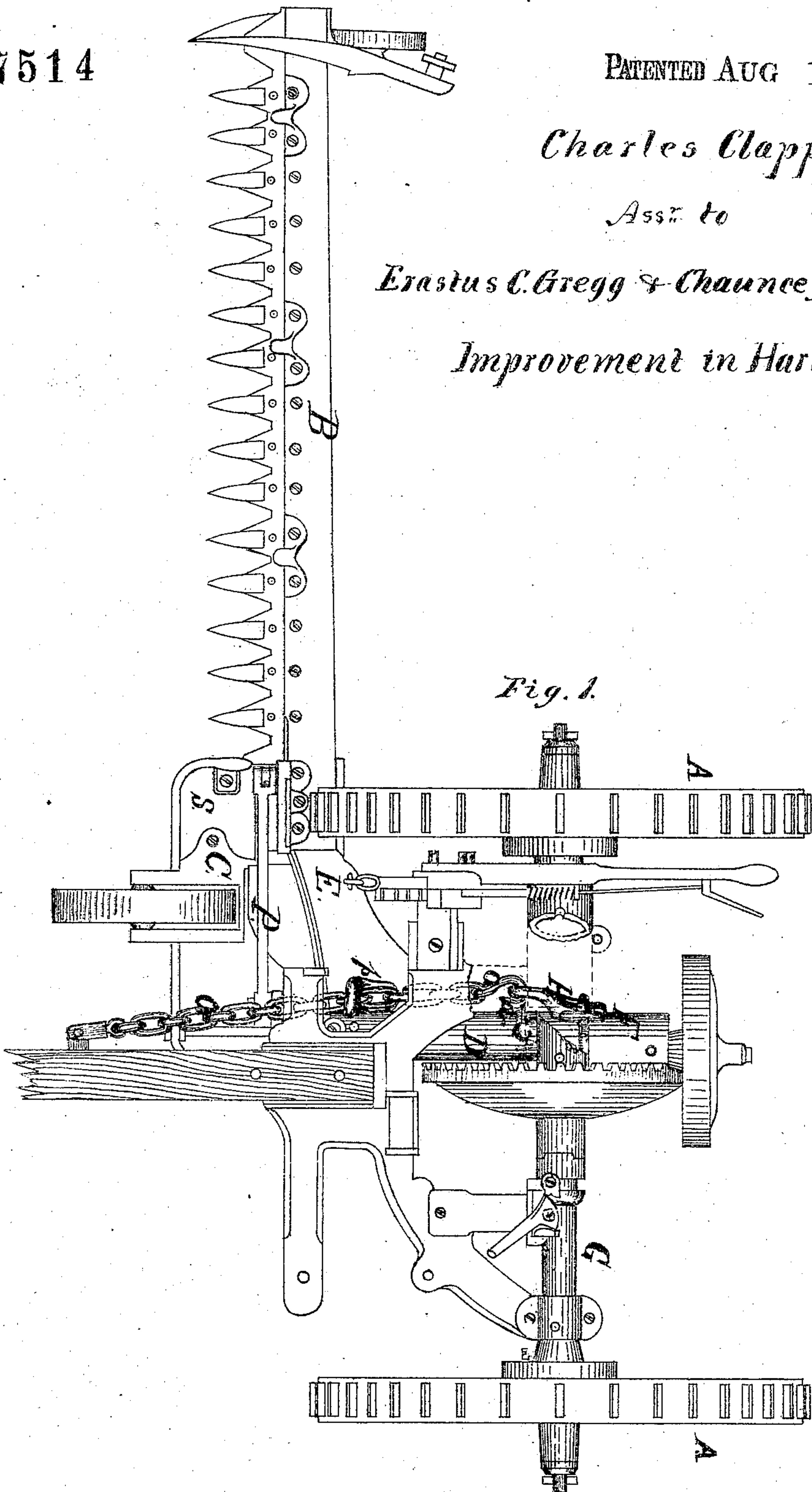


Fig. 1.

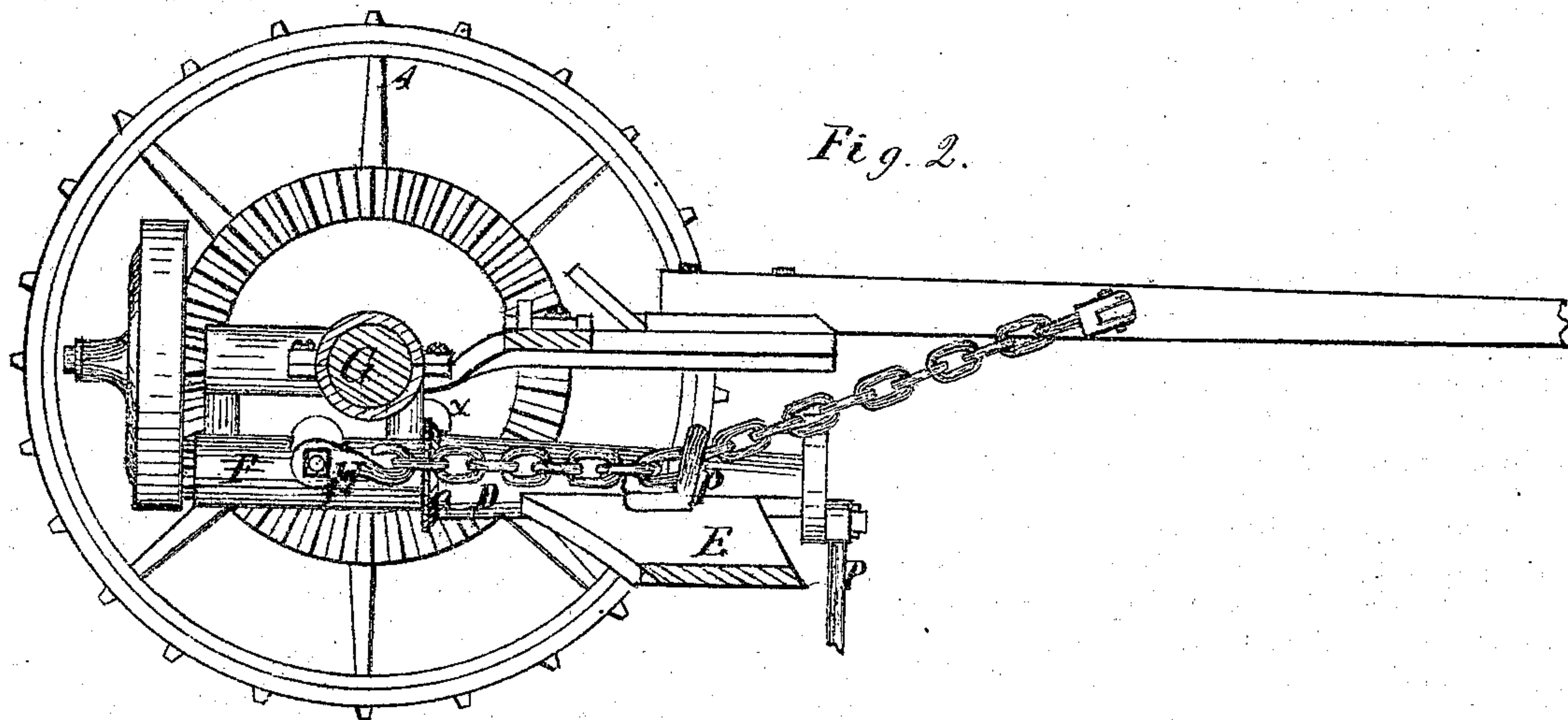
Stephen Clough  
J. D. Motte Smith

WITNESSES

Charles Clapp

INVENTOR

117514



D. J. Brown }  
R. D. Smith } WITNESSES

INVENTOR,

Charles Clapp,  
By his Att'y,  
J. S. Brown.



# UNITED STATES PATENT OFFICE.

CHARLES CLAPP, OF TRUMANSBURG, NEW YORK, ASSIGNOR TO ERASTUS C. GREGG, AND CHAUNCEY P. GREGG, OF SAME PLACE.

## IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. 117,514, dated August 1, 1871; antedated July 21, 1871.

*To all whom it may concern:*

Be it known that I, CHARLES CLAPP, of Trumansburg, in the county of Tompkins and State of New York, have invented a new and useful Improvement in Harvesters; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing making part of this specification—

Figure 1 being a plan of a harvester provided with my improvement; Fig. 2, a vertical section thereof in a plane cutting from front to rear.

Like letters designate corresponding parts in both figures.

The object of this invention is to effect an improvement especially in that kind of harvesters shown in the drawing and described in the specification of Letters Patent of the United States granted to me bearing date the 10th day of May, 1870, and numbered 102,776, in which the cutting apparatus is made to rise and fall by having the inner shoe and grass-shield attached to or connected with a sleeve which turns or vibrates on a tube covering the crank-shaft of the cutter-bar, and the invention is more particularly adapted to that kind of machine; and the invention consists in a flexible brace or brace-chain so connected with the pole, with the flange which supports the inner shoe of the cutting apparatus, and the frame of the machine back of and below the main axle, as to relieve the said flange and its sleeve from strain in drawing the machine, and to give support to the said flange when the machine is in motion, substantially as herein specified.

Let A A represent the driving-wheels of the harvester; B, the cutting apparatus; C, the grass-shield and inner shoe combined; D, the sleeve to which the latter are connected; E, the flange on the side of the sleeve and forming the connection between the same and the inner shoe; and P, the pitman of the harvester. A casting, F, forming a tubular projection of a head or frame in which the axle G revolves, receives and forms the bearing of the crank-shaft. Forward of the axle this tubular projection F has the form of a

skein, fitting inside of the sleeve D, so that the crank-shaft revolves inside of it, and the sleeve D turns or vibrates on the outside of it. The rear end of the sleeve D has a flange, *a*, which fits under and behind a lip, *x*, on the tubular projection F, so as to keep the sleeve in place, and, at the same time, allow the sleeve with its flange E to vibrate freely on the said skein of the projection. Heretofore the practice has been to attach a chain, O, to a lug on the flange E, as close to the sleeve D as possible, and connect the said chain with the pole T of the harvester, and thereby give support to the said flange and the inner end of the cutting apparatus. But, by thus attaching the brace-chain, a strong draft or strain comes upon the sleeve D in such a manner as to produce a powerful drawing action on the lip *x* and flange *a*, thereby frequently causing the said parts to break and always to rapidly wear away. By my present invention the flexible brace or brace-chain O is attached to the tubular projection F back of the line of the main axle and beneath it, the attachment being, by means of a hook, H, or its equivalent, bolted upon or cast with the tubular projection. The brace-chain thence extends forward through a loop or eye, *p*, on the flange E near the sleeve D, as shown, and thence forward and upward to the pole T. The loop *p* may also be either cast upon or attached to the flange E. Thus the strain on the sleeve D and its flange *a*, as well as on the hook or lip *x*, is relieved, and the support is transferred back to the frame portion supported by the main axle, and no part is liable to give way and none of the working parts are subjected to undue friction.

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

The brace-chain O, attached to the frame or tubular projection F and to the pole T, and supporting the flange E of the sleeve D by means of the loop *p*, substantially as and for the purpose herein specified.

CHARLES CLAPP.

Witnesses:

J. DE MOTTE SMITH,  
STEPHEN CLOUGH.