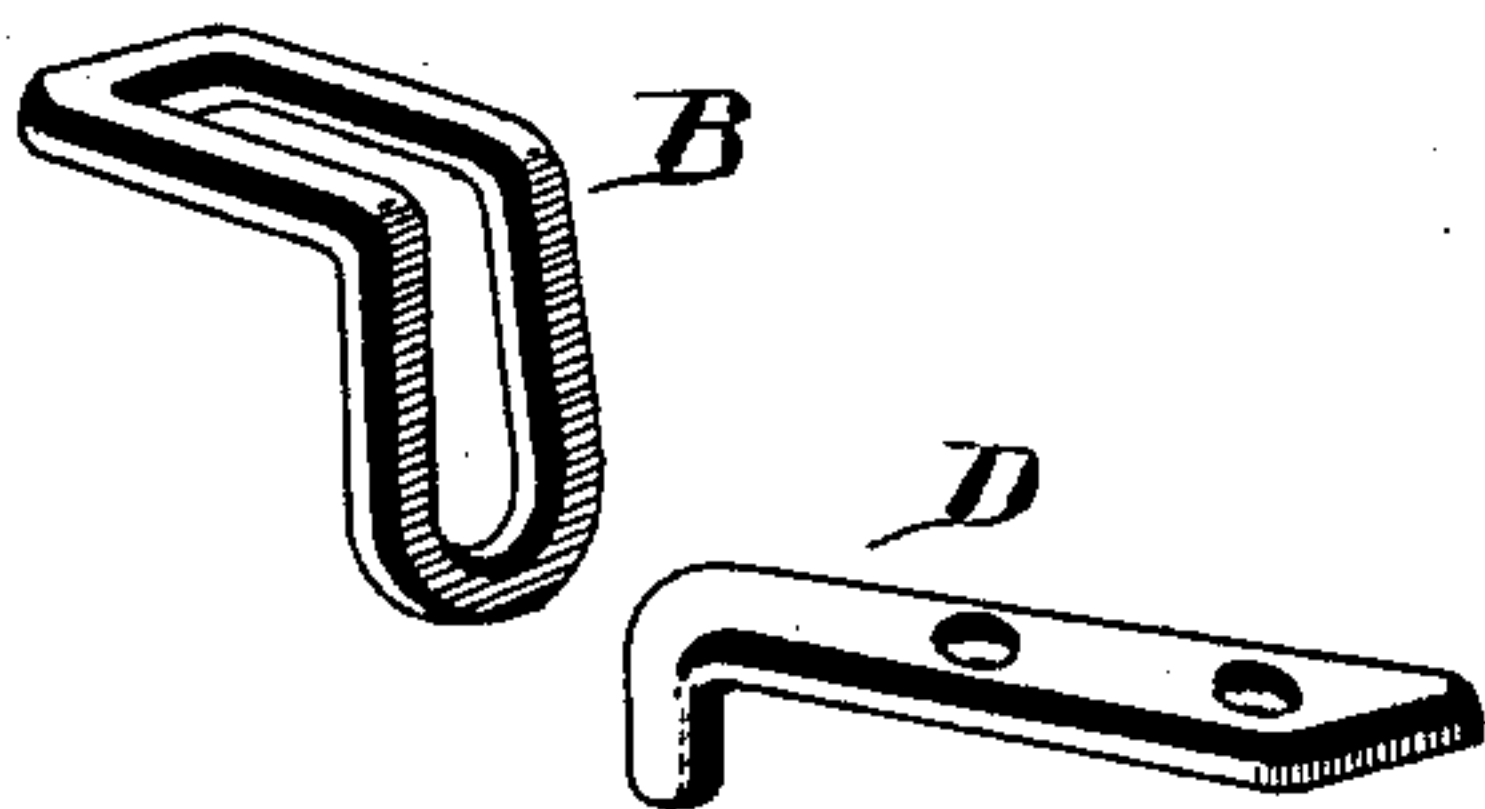
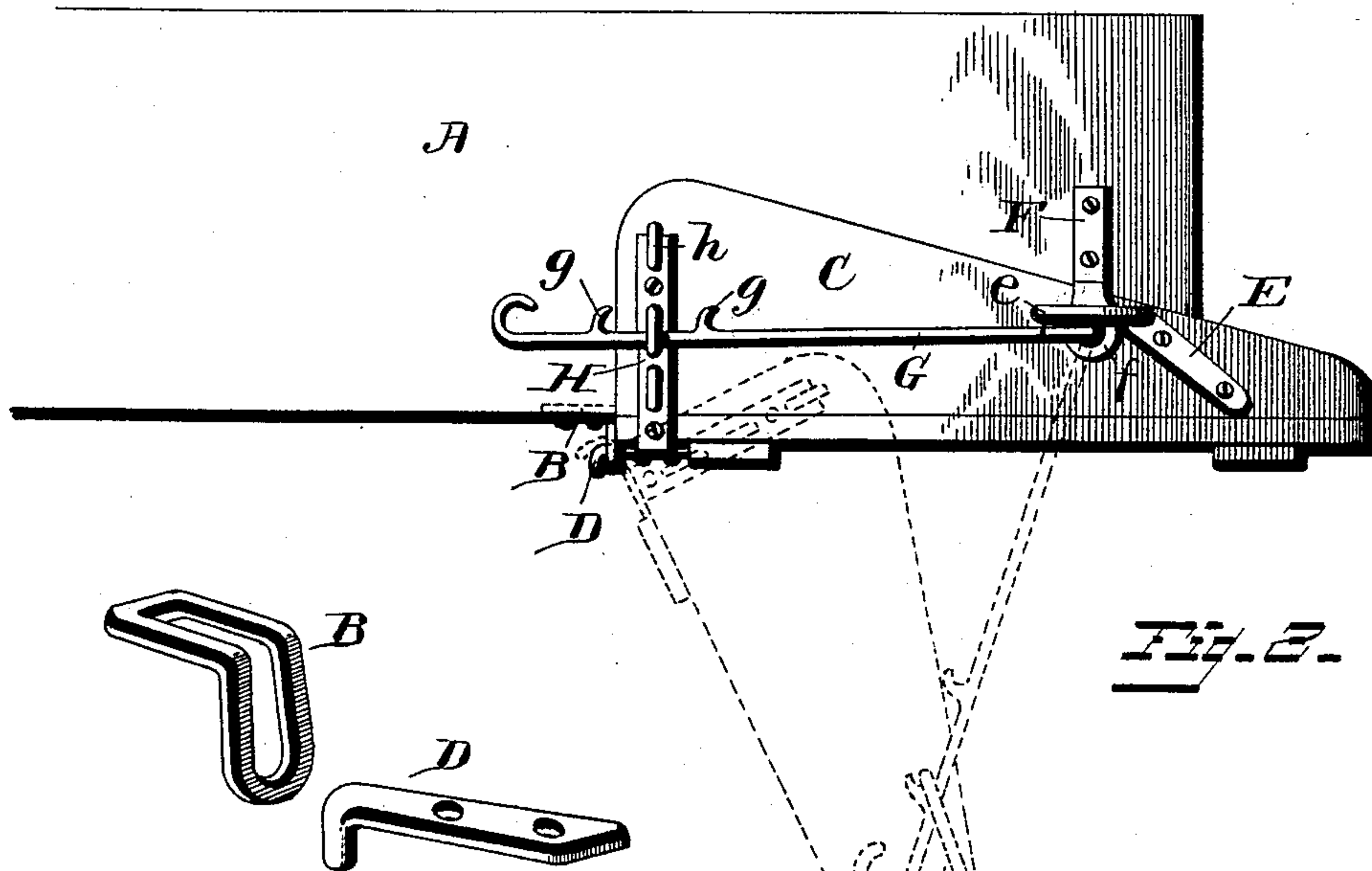
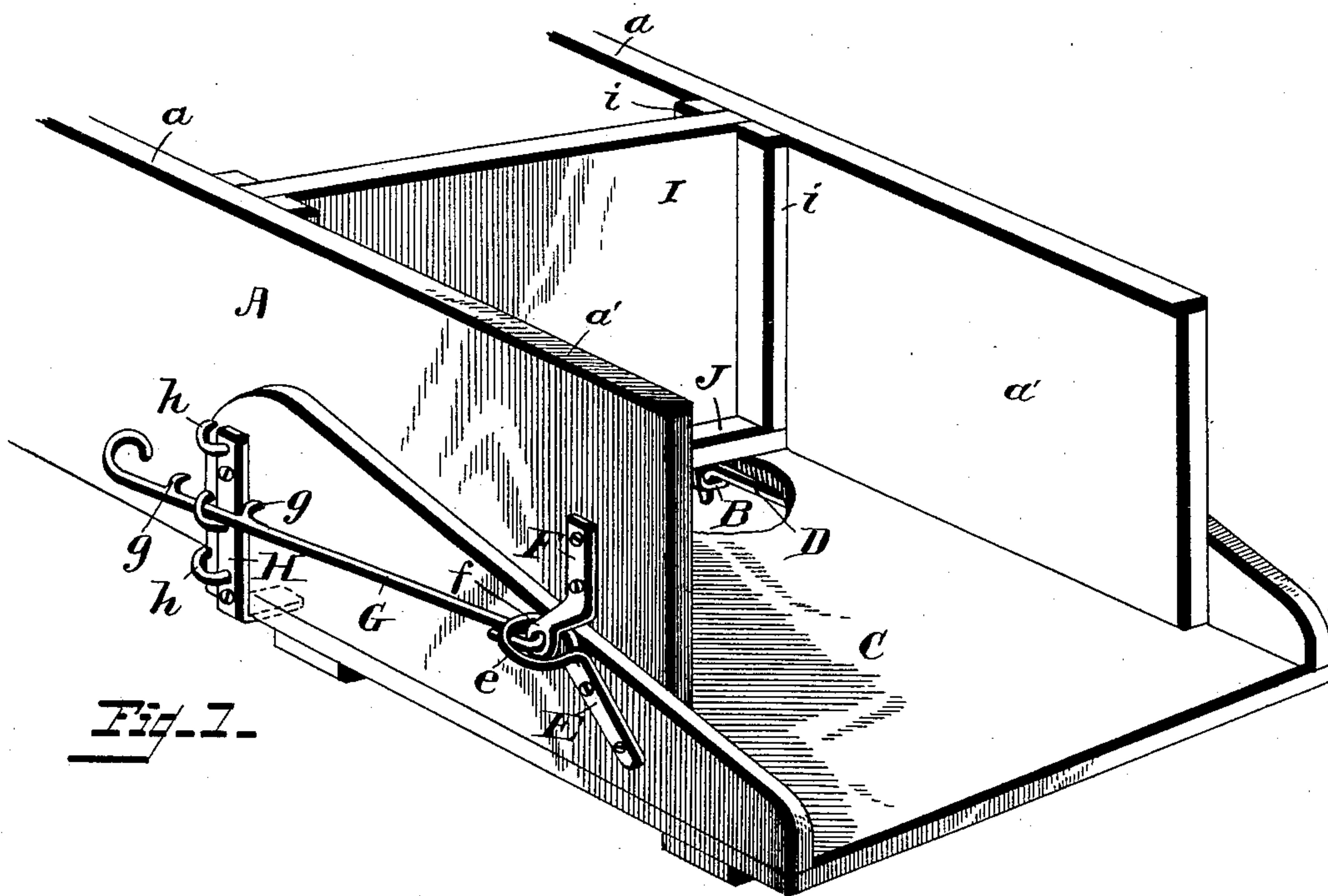


(No Model.)

W. D. HAWK & O. S. FRENCH.
END GATE.

No. 481,491.

Patented Aug. 23, 1892.



Witnesses
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UNITED STATES PATENT OFFICE.

WALTER DANIEL HAWK, OF ROCK ISLAND, AND OELL SPROUT FRENCH, OF
MONMOUTH, ILLINOIS.

END-GATE.

SPECIFICATION forming part of Letters Patent No. 481,491, dated August 23, 1892.

Application filed March 4, 1892. Serial No. 423,759. (No model.)

To all whom it may concern:

Be it known that we, WALTER DANIEL HAWK, of Rock Island, county of Rock Island, and OELL SPROUT FRENCH, of Monmouth, Warren county, in the State of Illinois, citizens of the United States, have invented certain new and useful Improvements in End-Gates; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to means for attaching and supporting a scoop-board to the rear end of a vehicle-body, whereby the said scoop-board can be adjusted to any angle and can be applied to any vehicle-body and have positive connection therewith.

The improvement consists of the novel features and the peculiar construction and combination of the parts, which will be hereinafter more fully described and claimed, and which are shown in the annexed drawings, in which—

Figure 1 is a perspective view of the rear end of a vehicle-body, showing the invention applied, part of the scoop-board being broken away to show the connections between it and the said vehicle-body. Fig. 2 is a side view showing the operation of the invention by dotted lines. Fig. 3 is a detail view of the scoop-board-connecting devices detached.

The vehicle-body A is of ordinary construction, comprising the side pieces *a a*, the end-gate I, which is adapted to slide between cleats *i*, provided on the side pieces *a* and the bottom J. The side pieces are projected some distance in the rear of the end-gate I and the bottom J, as shown at *a'*. The scoop-board C has positive connection with the vehicle-bottom J by means of the right-angled bracket B, which is secured to the said bottom or a cross-bar attached thereto, and the hooked plate D that is secured to the scoop-board.

To facilitate the adjustment of the right-angled bracket B to the vehicle-bottom, it is slotted or open, one member receiving the fastening-bolt the other the hooked end of the plate D, as most clearly shown in Fig. 1. By this means the scoop-board has positive

means of connection with the vehicle-body, and can be readily detached therefrom and adjusted to any angle. There will be as many of these brackets B and hooked plates D as necessary, ordinarily two will suffice, one being located near each end of the scoop-board.

The strap-iron E, having ring *e* at one end, is secured to the scoop-board, and the approximately right-angled bracket F, secured to the extended side *a* of the vehicle-body, has a vertical extension *f*, which is constructed to enter the ring *e* when the scoop-board is at its highest position, so that the rod G, which is attached to the said bracket F, may extend in a nearly horizontal position. The rear or free end of rod G is notched or provided with a series of hooked projections *g*, which are constructed to engage with the ring *e* and support the scoop-board at the required position.

The angle-plate H, which is secured to the side of the scoop-board near the inner end thereof, is provided with hooks *h* at different levels, which are engaged by the free end of rod G to support the scoop-board in an elevated or horizontal position. It will be understood that both sides of the scoop-board and vehicle-body will be similarly equipped.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The combination, with a vehicle-body having an end-gate and having the sides projected a short distance in the rear of said end-gate and the vehicle-body and a scoop-board adapted to be supported at its inner end by a hinged joint to the vehicle-body about in line with the rear end of the vehicle-bottom, of a rod having connection at one end with the projected ends of said side pieces of the vehicle-body, and adapted to engage with a lateral projection on the side of and near the outer end of the scoop-board, and a plate H near the inner end of said scoop-board having projections at different levels to engage with the other end of said rod, substantially as described.

2. The combination, with a vehicle-body having its sides projected in the rear of the

end-gate and the bottom of said vehicle-bottom and a scoop-board adapted to be supported at its inner end by a hinged joint to the vehicle-body about in line with the rear
5 end of the vehicle-bottom, of a rod having a series of projections at one end and connected at the other end with the side of the vehicle-body, a ring *e*, secured to the scoop-board and constructed to have the said rod pass there-
10 through and engage with one of the series of projections on said rod to support the scoop-board in the required position, and a plate *H*, secured to the said scoop-board near its inner ends, and having projections at different lev-
15 els to be engaged by the said rod to support the scoop-board in a horizontal position, substantially as set forth.

3. The combination, with a vehicle-body having its sides projected in the rear of the
20 end-gate and the bottom thereof, a scoop-board, and the slotted right-angled brackets *d*

and the hook-plates *b* to pivotally connect the scoop-board with the vehicle-bottom, of a strap-iron secured to the scoop-board and having ring *e*, a bracket secured to the vehicle-body 25 and having a vertical extension *f*, which is adapted to project into the said ring *e*, a notched rod connected with the said vertical extension *f*, and a plate *H*, attached to the inner end of the scoop-board and having lateral 30 extensions at different levels, substantially as described, for the purpose specified.

In testimony whereof we affix our signatures in presence of two witnesses.

WALTER DANIEL HAWK.

OELL SPROUT FRENCH.

Witnesses to the signature of W. D. Hawk:

W. JAS. HAWK,

FRED McMILLAN.

Witnesses to the signature of O. S. French:

W. F. WARREN,

FRED McMILLAN.