

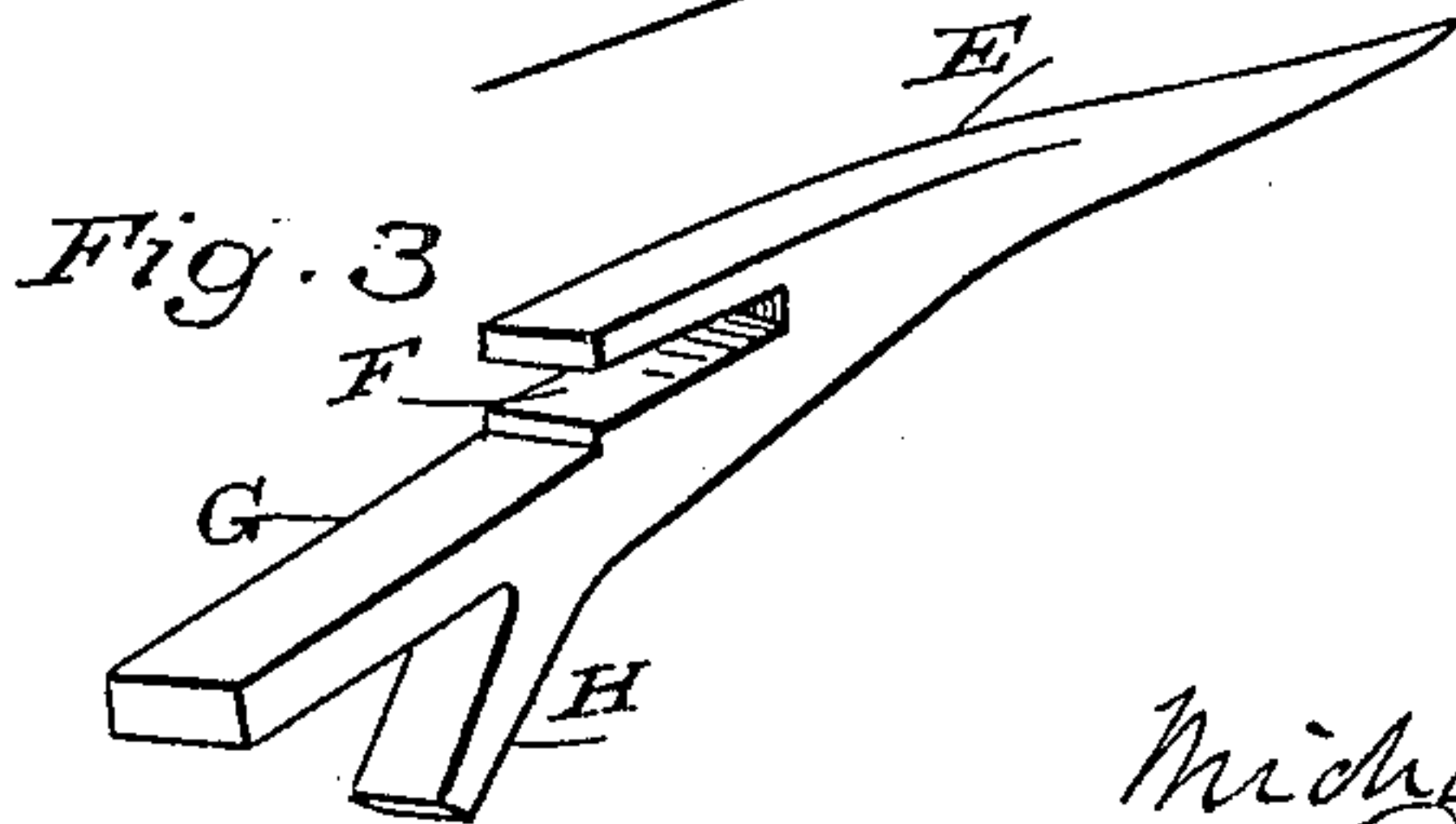
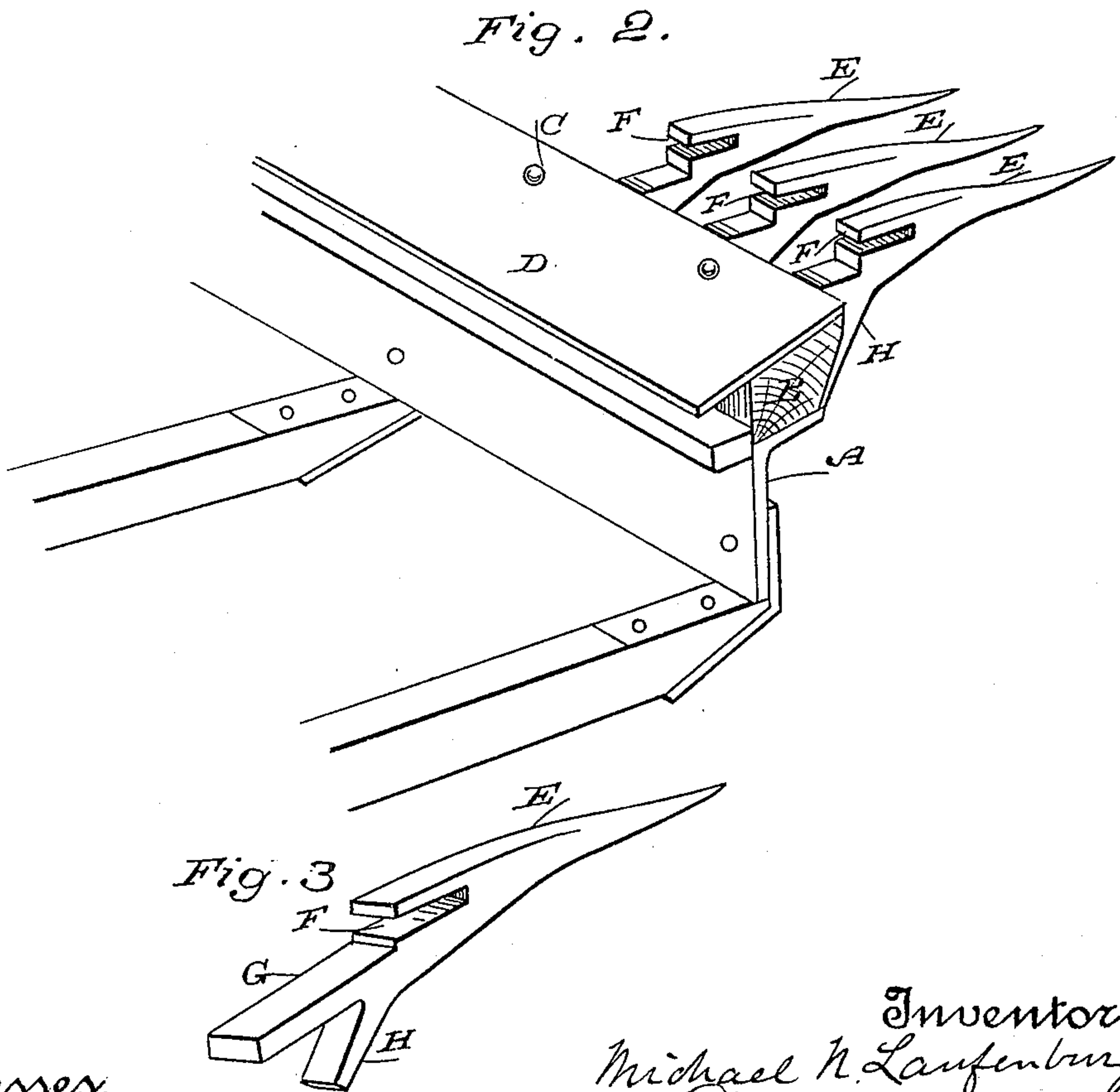
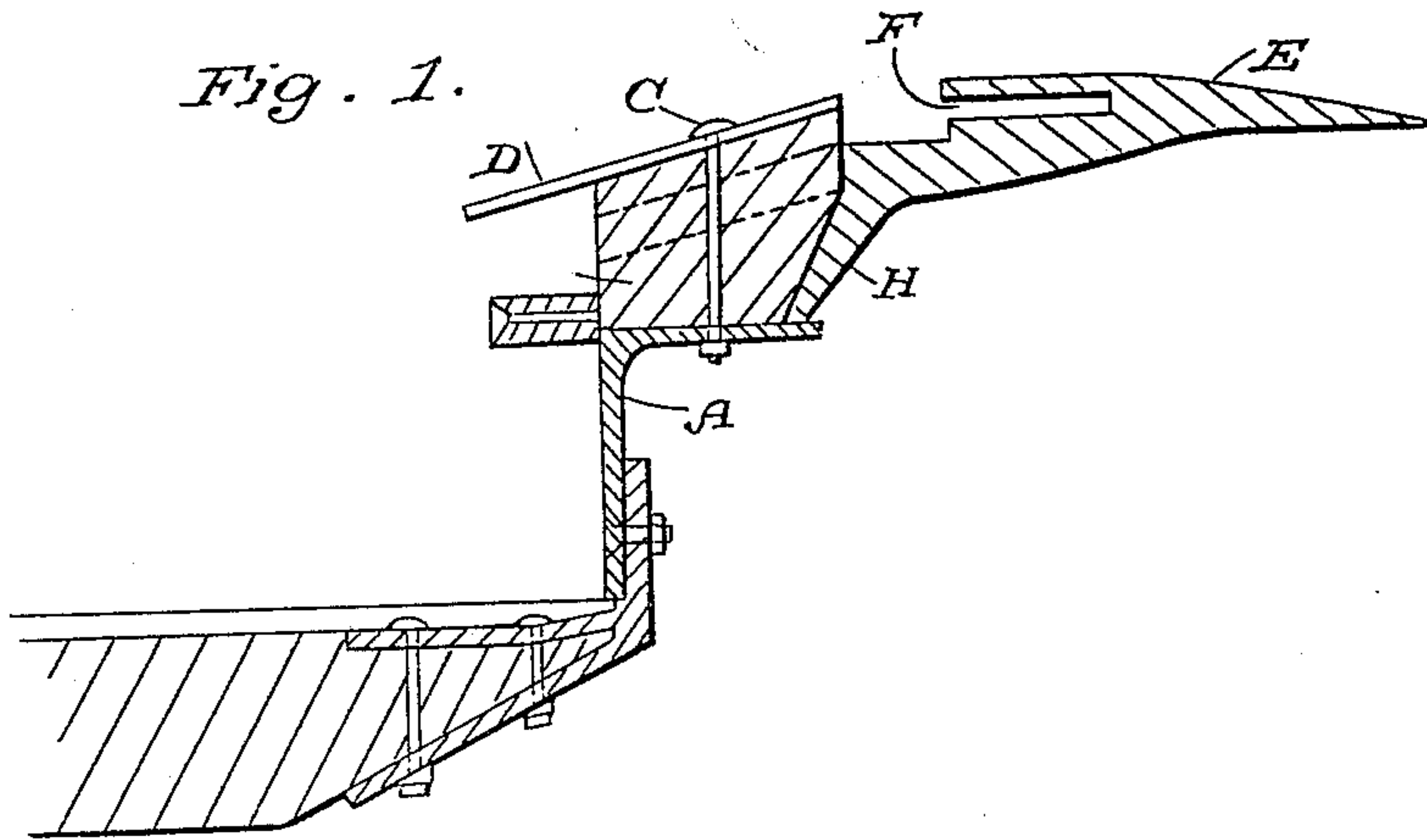
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(No Model.)

M. N. LAUFENBURG.  
FINGER BAR.

No. 475,964.

Patented May 31, 1892.



Witnesses,  
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# UNITED STATES PATENT OFFICE.

MICHAEL N. LAUFENBURG, OF STOCKTON, CALIFORNIA.

## FINGER-BAR.

SPECIFICATION forming part of Letters Patent No. 475,964, dated May 31, 1892.

Application filed July 1, 1891. Serial No. 398,168. (No model.)

*To all whom it may concern:*

Be it known that I, MICHAEL N. LAUFENBURG, a citizen of the United States, residing at Stockton, San Joaquin county, State of California, have invented an Improvement in Finger-Bars for Headers; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to certain improvements in finger-bars for headers and harvesting machinery.

It consists in certain details of construction, which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a section showing my invention. Fig. 2 is a perspective view of the same. Fig. 3 is a perspective of one of the guards.

The usual construction for finger-bars for headers and similar machinery is either to secure the guard directly into a wooden beam or to a beam which is made of angle-iron or steel. Both these constructions are open to objection—in the first because any undue strain caused by the point of one of the guards striking the ground is apt to split the bar, and in the second because such strain will break the guard and bolt-holes and make it difficult to replace it. In my invention I use a composite bar.

A is the main portion of the bar, which is made of steel plate rolled into an angular form, as shown. Upon the top of this is fixed a wooden beam B, which is secured to the horizontal portion of the angle-beam A by bolts C, passing through the two and also through the steel plate D, which extends along the top of the wooden beam B. The top of the beam B is beveled or inclined, so that the plate D stands at a sufficient inclination toward the rear to insure the delivery of the cut grain upon the carrying-belt, which travels behind the sickle-bar, the inclination of this top being sufficient to prevent the grain falling off the front when the front of the machine has been depressed to cut low grain. The guards E have the usual channel F, in which the sickle travels and by which it is guided in its reciprocation. From the rear end of each guard extends the shank G, which is bent downwardly and is driven through the

wooden beam B, as shown. This guard has an angular lug H, projecting downwardly, so as to form a fork with the shank G. This downwardly-projecting portion is fitted to extend along the front of the wooden bar B and its lower end rests upon the top and front end of the angle-plate A, thus serving as a brace and support for the guard and receiving all the strain that may come upon the point of the guard, this strain being transmitted to and resisted by the front edge of the plate A. This relieves the wooden bar of all these strains, and the bar has additional strength by reason of the metal plate D above and the bolts C, by which it is firmly clamped between the plate D and the top of the angle-bar A.

Among the advantages of my construction may be observed, first, a hole (not a slot) is made for the end of each guard-finger. Consequently it is entirely surrounded by wood and can be driven in tight. The plate D on top is held by bolts C, passing through the wooden beam between the fingers and into the horizontal part of the angle-iron portion A of the beam. This clamps the wooden beam between iron plates, so that it cannot split or warp. Again, the plate D is continued rearwardly to form the upper part of the channel for the front edge of the carrying belt or draper, and by bolting the wooden finger-bar upon the top of the angle-iron plate A it and the guards are carried so far forward of the vertical portion A of the beam that the latter will not strike the standing grain and bend it down before the sickle can cut it. It will also be noted that any downward pressure upon the points of the guards is resisted and the strain taken off that part of the guard which enters the wood by the angular brace H, the lower end of which rests upon the edge of the bar A, and thus relieves the wooden bar of all strain of this sort. The guards are also easily removed by loosening the clamping-bolts C and driving the guards out from the rear. When again driven in and when the bolts are tightened, they clamp and compress the wood, so as to retain the guards firmly. This construction makes it easy to introduce and remove the guards when necessary. At the same time it makes it a very strong construction.



Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A finger-bar for harvesters, consisting of  
5 the angle-steel plate, a wooden bar fitted upon the upper surface thereof, having the top beveled or inclined rearwardly, and a metal plate fitting the top of the wooden bar and bolted through it to the steel plate beneath, in combination with the sickle guards or fingers hav-  
10 ing shanks which extend through the wooden bar, and angular projections or lugs extending down the front of the bar and resting upon the top of the steel angle-plates, substantially  
15 as herein described.

2. The sickle guards or fingers having the slotted guides within which the sickle reciprocates, the rearwardly-extending shanks inclining downwardly and rearwardly, as shown,

and the forked projections or lugs, in combination with the finger-bar consisting of the angle-steel plate, upon the front edge of which the guard-lugs rest, the wooden bar fitted to and extending along the upper surface of said plate and having the shanks of the guards  
20 driven into it at an angle, as shown, and the metal surface-plate fitted to the top of the wooden bar, inclining downwardly and rearwardly, and bolts or rivets whereby the plates and bar are secured together, substantially  
25 as herein described.

In witness whereof I have hereunto set my hand.

MICHAEL N. LAUFENBURG.

Witnesses:

S. H. NOURSE,  
J. A. BAYLESS.