

(No Model.)

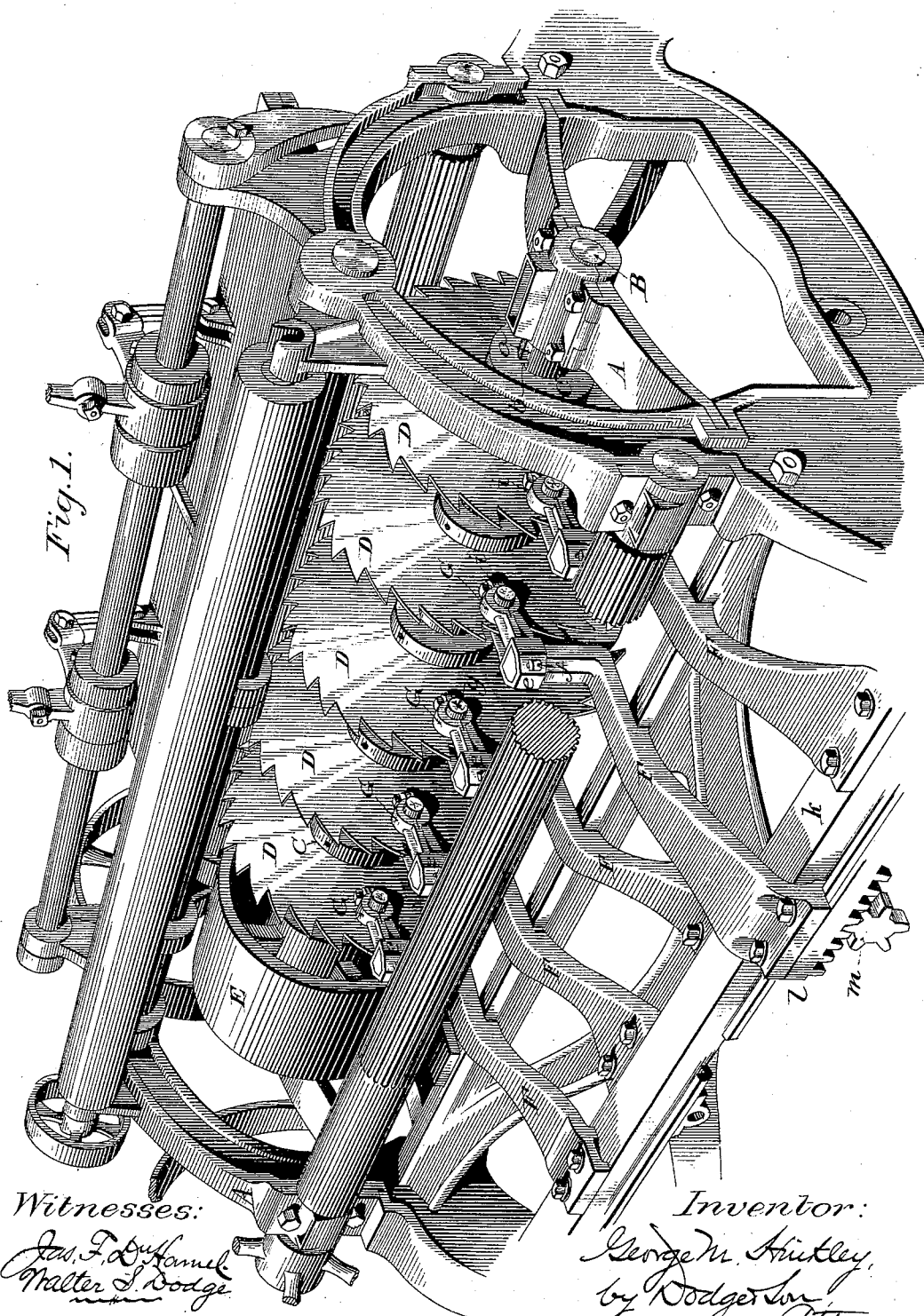
2 Sheets—Sheet 1.

G. M. HINKLEY.

GANG EDGER.

No. 304,323.

Patented Sept. 2, 1884.



Witnesses:

John F. Duff  
Walter S. Dodge

Inventor:

George M. Hinkley,  
by Dodge & Son  
Attys.

(No Model.)

2 Sheets—Sheet 2.

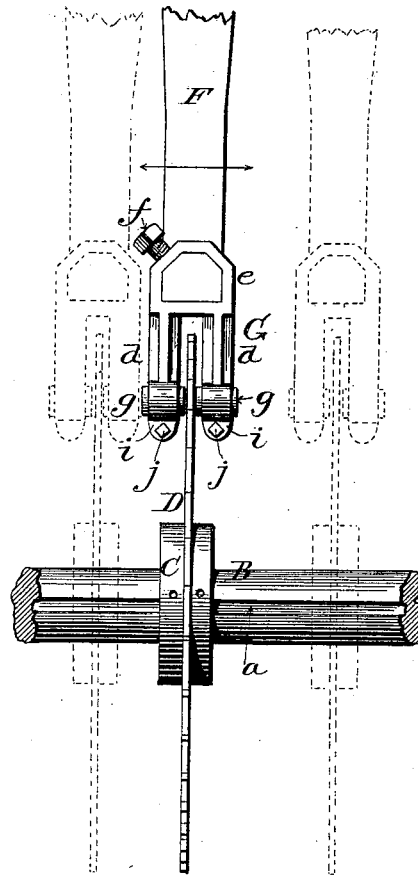
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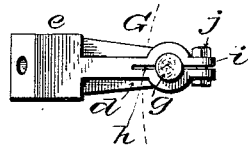
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*Fig. 2.*



*Fig. 3.*



*Witnesses:*  
*Geo. F. Duhamel*  
*Walter S. Dodge*

*Inventor:*  
*George M. Hinkley*  
*by Dodge & Co.*  
*Attys.*

# UNITED STATES PATENT OFFICE.

GEORGE M. HINKLEY, OF MILWAUKEE, WISCONSIN, ASSIGNOR TO EDWARD P. ALLIS & CO., OF SAME PLACE.

## GANG-EDGER.

SPECIFICATION forming part of Letters Patent No. 304,323, dated September 2, 1884.

Application filed May 7, 1884. (No model.)

### *To all whom it may concern:*

Be it known that I, GEORGE M. HINKLEY, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain Improvements in Gang-Saw Edgers, of which the following is a specification.

This invention has reference to gang-saw edgers and all kindred machines in which it is necessary to adjust or slide a saw on its arbor from one point to another, and relates particularly to that class of shifting devices which straddle and act directly upon the saw-blade instead of upon the hub or collar which carries the blade.

The invention consists in a novel construction and arrangement of parts hereinafter fully set forth.

In the drawings hereto annexed, Figure 1 is a perspective view of the gang-saw edger embodying my improvements; Fig. 2, a plan view of one saw and the shifting device; Fig. 3, a side view of the same.

I may remark here that, as the present invention relates solely to the shifting device and that part only which acts upon the saw, some of the details of the machine are omitted as not in any way necessary to a clear understanding of the invention. All parts omitted from the drawings may be of any usual or approved construction.

A indicates a frame of ordinary form and construction, in which is mounted a horizontal rotary saw-arbor or shaft, B, provided with a series of saws, D, and a band-pulley, E, the saws or a portion of them being free to slide upon the arbor. The arbor is provided with a horizontal groove, *a*, to receive splines or feathers *b* of the hubs C of the saws, which arrangement prevents the saws from revolving independently of the shaft, while permitting them to move laterally thereon, as usual.

F indicates a shifting lever or arm, of which there is one for each saw, the same device which is used to shift the saws serving also as a guide to prevent wobbling or vibration. Each lever is provided at its forward or inner end with a bifurcated end or extension, G, having a space between its arms *d* somewhat wider than the saw, and arranged to straddle the saw-blade, as plainly shown in Figs. 1 and

2. The extension or fork G is preferably made separate from the arm F, and is formed with a polygonal eye, *e*, to fit the upwardly-turned end of said arm, which is of like form. This construction permits the vertical adjustment of the forks G, which are secured upon the arm F by set-screws *f*, as shown, and also permits them to be made of brass or other metal softer than the arms F, and consequently less liable to injure the saws in case of accidental contact. The arms *d* of fork G are perforated to receive bearing-blocks *g*, of wood or other suitable material, which bear against the faces of the saw, and serve not only to move the same laterally when the arm F is moved, but also act as guides to prevent the wobbling or vibration of the saw in the same manner as the ordinary saw-guide. The arms *d* are preferably formed with a slit or opening, *h*, from the block *g* outward, and provided with lips or ears *i*, through which a clamping screw or bolt, *j*, is passed to draw the ears firmly together and insure the firm clamping of said blocks, which may be adjusted, when required, by loosening the screws or bolts *j* and moving their blocks as needed, after which they will again be clamped as before. The arms F move in guides or on ways *k k*, as usual, and are provided with toothed racks *l*, which are moved longitudinally by pinions *m*, though any other convenient means of shifting the arms F may be adopted without in any way affecting the invention herein set forth. When the saws are in motion the lateral movement of the arms F will cause the saws to shift far more easily than the ordinary plan of shifting from the hubs, though the shifting cannot be so well done while the saws are at rest. As, however, the shifting is always done after the saws are put in motion, no inconvenience results.

Leather, metal, or other material may be employed for the blocks *g*, and other minor details may be varied as desired without departing from the spirit of my invention, which consists, broadly, in a shifting device adapted and arranged to act directly upon the saw-blade.

Having thus described my invention, what I claim is—

1. In combination with a saw-arbor and

with a saw laterally adjustable thereon, a laterally-adjustable shifting-arm having an upwardly-turned polygonal end, and a forked extension having an eye encircling said upwardly-turned end and secured thereto, and arranged, substantially as described and shown, to straddle the saw.

2. In combination with a saw-arbor and with a saw laterally adjustable thereon, a laterally-adjustable shifting-arm provided with a toothed rack and an upwardly-turned end, furnished with a forked extension to straddle the saw, and a pinion meshing with the rack and serving to move the shifting-arm, substantially as described.

3. In combination with a saw-arbor and with a saw laterally adjustable thereon, a laterally-adjustable shifting-arm having a forked end to straddle the saw, the arms of said fork being formed with slotted eyes to receive bearing-blocks, and provided with screws for contracting said eyes and clamping the bearing-blocks, substantially as set forth.

GEO. M. HINKLEY.

Witnesses:

WM. W. ALLIS,  
FRANK A. HALL.