(No Model.)

H. SHAW.

COLTER HANGER.

No. 305,853. Patented Sept. 30, 1884.

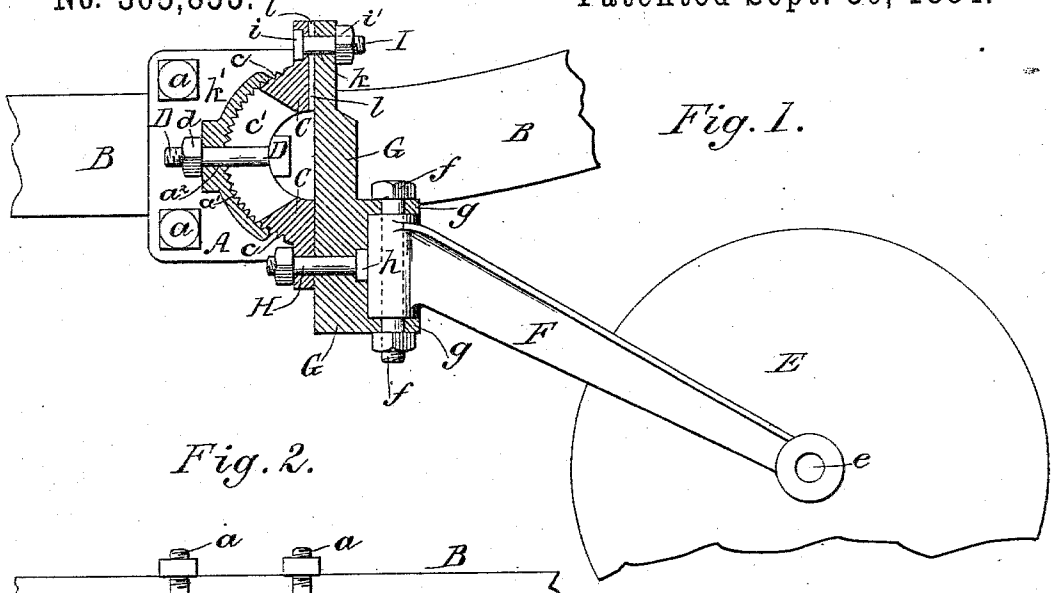


Fig. 1.

Fig. 2.

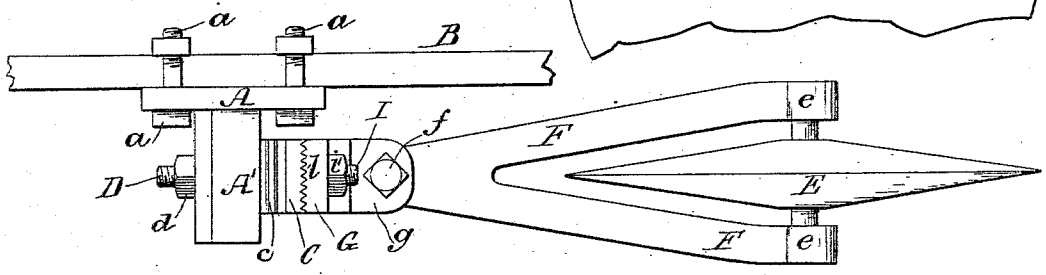


Fig. 4.

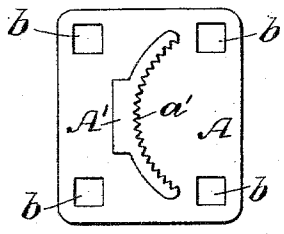


Fig. 3.

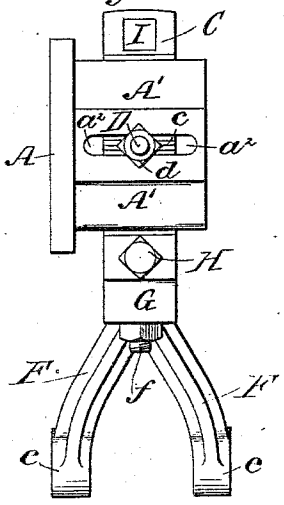
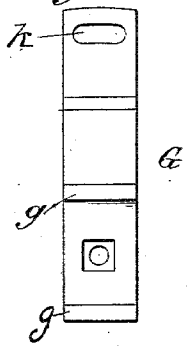


Fig. 5.



WITNESSES:

John A. O'Connor

C. Sedgwick

INVENTOR:

H. Shaw

BY Munn & Co

ATTORNEYS.

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

UNITED STATES PATENT OFFICE.

HANC SHAW, OF CAMPBELL HILL, ILLINOIS.

COLTER-HANGER.

SPECIFICATION forming part of Letters Patent No. 305,853, dated September 30, 1884.

Application filed March 17, 1884. (No model.)

To all whom it may concern:

Be it known that I, HANC SHAW, of Campbell Hill, in the county of Jackson and State of Illinois, have invented a new and Improved Colter-Hanger, of which the following is a full, clear, and exact description.

My invention relates to hangers for supporting rotary colters from plow-beams, the object being to provide a colter-hanger of simple and durable construction, and one adapted for quick, easy, and secure adjustments in use.

The invention consists in special constructions and combinations of parts of the hanger, whereby provision is made for adjusting the colter to work at varying depths in the soil, and whereby also the colter may readily and accurately be adjusted laterally, and also in alignment with the landside of the plow, to facilitate a light draft and easy handling of the plow, and whereby also the colter may swing clear of the obstructions in its path to avoid breakage of the parts, all as hereinafter fully described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional side elevation of my improved hanger and a part of the plow-beam. Fig. 2 is a plan view thereof. Fig. 3 is a front end view of the same with the colter removed. Fig. 4 is a face view of the plate by which the hanger is bolted to the plow-beam, and Fig. 5 is a rear view of the back plate to which the colter-fork is jointed.

The letter A indicates the plate by which the hanger is secured to the plow-beam B by bolts *a*, passed through holes *b* of the plate, and through or at each edge of the beam, a bolt, *a*, at two diagonally-opposite corners usually being sufficient.

Projecting at right angles from the plate A, and formed on or fixed to the plate, is a curved plate or flange, A′, which has angular grooves or serrations *a′* transversely across its rear face, to engage with the serrations *c* on the front of the curved block C, which latter is slotted vertically through the center, as at *c′*, to permit the passage of the bolt D, which passes also through the transverse slot a^2 of the flange A′ of plate A, so that upon tightening the nut *d* of bolt D the block C will firmly be held to the plate A, and upon slackening the nut *d* the block C may be shifted on or in the flange A′, to adjust the colter E as to height, for regulating its depth of cut in the soil. The colter E is hung at *e* in a fork, F, pivoted on a bolt, *f*, passed through lugs *g*, projecting from the rear side of the plate G, which is bolted at H to the lower flange of the block C, and at I to the upper flange of said block. The head *h* of bolt H preferably is countersunk into the face of plate G, as shown, and the bolt H is fitted snugly in the plate G, and in the block C, so as to allow the plate to swing sidewise on said bolt H as a pivot. The bolt I is fitted snugly in the block C, its head *i* preferably being countersunk therein, and said bolt I passes through an elongated slot, *k*, in the plate G, which slot is curved on a sweep from bolt H as a center, so that the upper end of plate G may be swung on bolt H to either side, for adjusting the colter E in perfect parallelism sidewise with the landside of the plow, and to cut freely in advance of the plow, and so that the plow will run truly and may easily be guided by the plowman. The block C, and with it the plate G and colter E, may be adjusted sidewise to and from the plow-beam by shifting the fastening-bolt D along the slot a^2 of the flange A′, to align the colter with the plow-point and landside, as will readily be understood. The opposing joint-faces of the block C and plate G at the ends next bolt I are notched or serrated, as at *l*, and in radii from pivot-bolt H, so that when the plate G is shifted to align the colter with the landside of the plow, as above described, and the bolt I is tightened by its nut *i′*, the colter-hanger will firmly be held where set against any side-thrusts of use. The colter E may swing sidewise on the bolt *f*, to clear itself of obstructions which otherwise might damage it or the parts of the hanger. By turning the plate A upside down the hanger may be adjusted either to right or left hand plows.

All parts of my improved hanger are simple, strong, and durable, and the complete adjustments for every possible requirement may quickly and easily be made by any one capable of handling a plow, and the hanger may

be fitted to plow-beams made of wood or metal, and the provisions for aligning the colter with the plow by swinging the plate G on bolt H permits the colter to be set properly sidewise without blocking out the plate A from the plow-beam, as commonly is done, the solid connection of the beam and plate in my improvement being far more substantial and desirable.

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

1. The combination, in a colter-hanger, of the beam-plate A, provided with a projecting curved flange, A′, the block C, fitted to the flange and slotted at c' for the fastening-bolt D, and the plate G, bolted to the block C, and having the colter-fork F pivoted to it in the plane of the plow-beam, substantially as shown and described.

2. The combination, in a colter-hanger, of the beam-plate A, provided with a curved flange, A′, having the elongated transverse slot a^2 and the serrations a', and the block C, to which the colter-fork is held, slotted at c' and provided with serrations c, and made adjustable vertically by the bolt D along the flange A′, substantially as shown and described.

3. The combination, in a colter-hanger, of the beam-plate A, provided with the curved flange A′, having serrations a', a block, C, slotted at c' for the fastening-bolt D, and having serrations c, engaging those a' of the flange A′, and the plate G, having serrations engaging with serrations upon the block C, substantially as shown and described.

4. The combination, in a colter-hanger, and with the beam-plate A, block C, and plate G, to which latter the colter-fork is held, and said plate G fitted on bolt H, and having a curved slot, k, in its forward end, of the serrations l in the opposing faces of the block and plate, and of the fastening-bolt I, substantially as shown and described.

5. In a colter-hanger, the following elements in combination: the beam-plate A, provided with a curved flange, A′, serrated at a', and the transverse slot a^2, the block C, provided with the slot c' and serrations c, the fastening-bolt D, the plate G, pivoted to block C at H, and having a slot, k, at one end, the serrations l in plate G and block C, the bolt I, and the colter-fork F, pivoted to plate G on a bolt, f, substantially as shown and described.

HANC SHAW.

Witnesses:
A. O. GERRING,
J. B. HODGES.