2 Sheets—Sheet 1.

J. M. & B. B. BROWN.

Horse Rake.

No. 5,132. Patented May 29, 1847.

Fig. 1

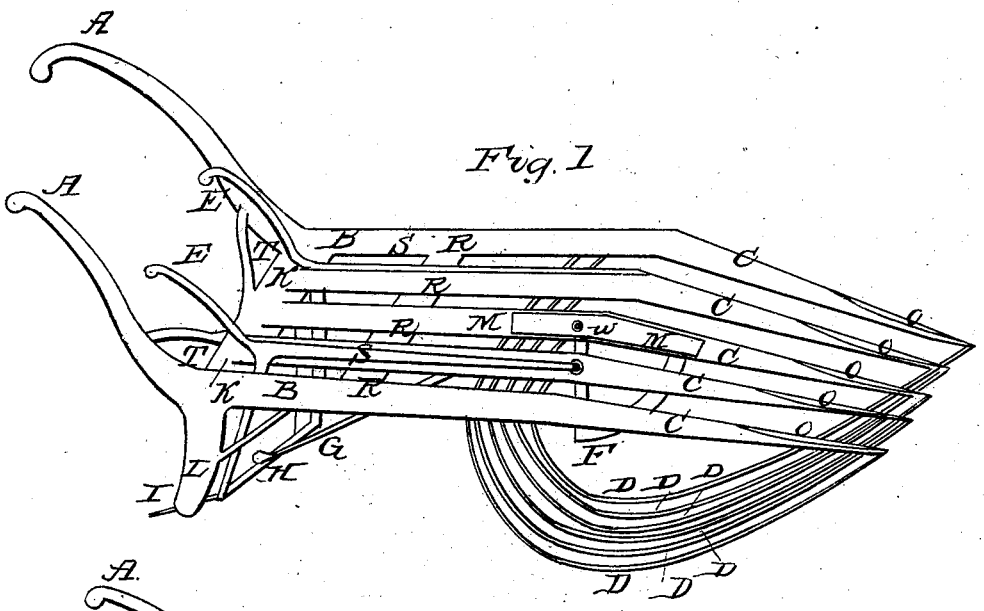


Fig. 2

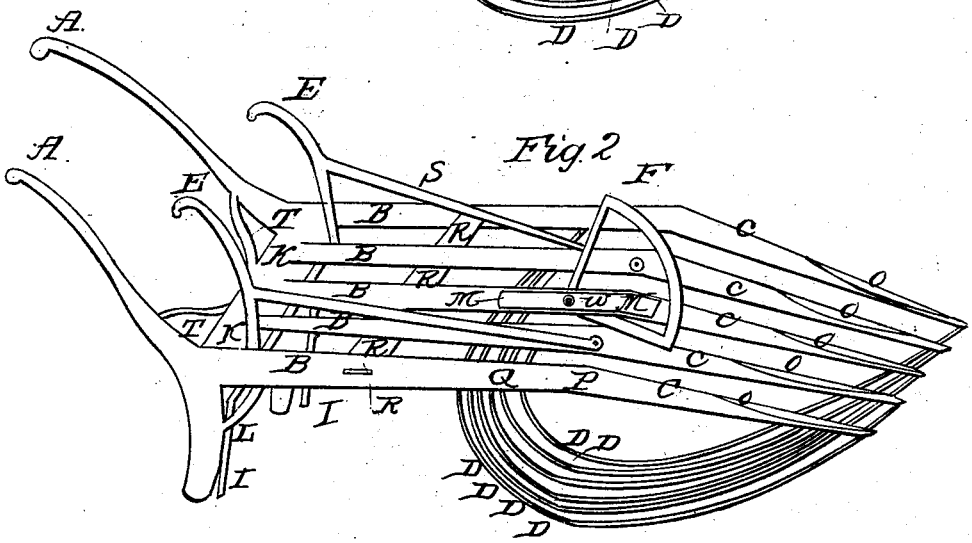
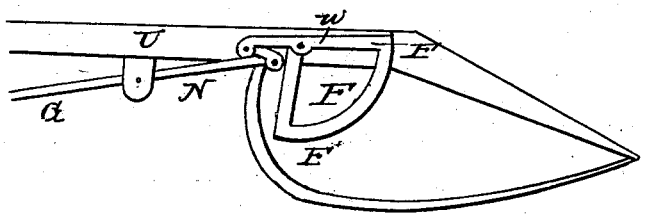


Fig. 5



2 Sheets—Sheet 2.

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Fig. 6.

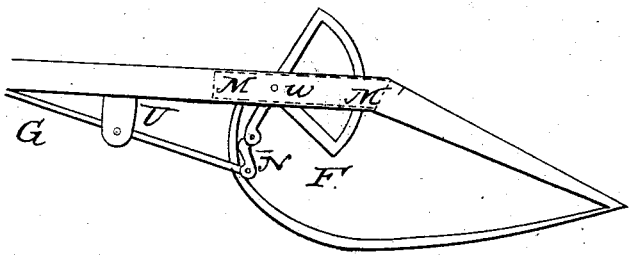


Fig. 3

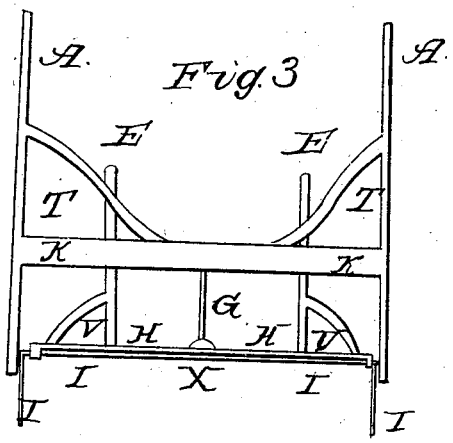
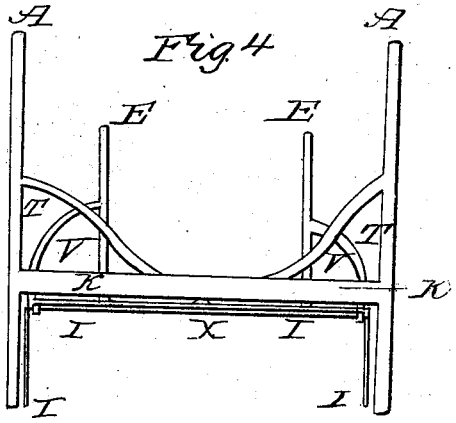


Fig. 4



UNITED STATES PATENT OFFICE.

JNO. M. BROWN AND B. B. BROWN, OF MARION COUNTY, OHIO.

GRAIN AND HAY RAKE.

Specification of Letters Patent No. 5,132, dated May 29, 1847.

To all whom it may concern:

Be it known that we, JOHN M. BROWN and BENJAMIN B. BROWN, of the county of Marion and State of Ohio, have invented a new and valuable Improvement in the Construction of Grain and Hay Rakes, and do hereby declare that the following is a full and accurate description thereof, to wit:

A frame constructed of wood iron or steel or a combination of two or more of these materials as represented in the accompanying drawing No. 1. This frame work consists of five fingers more or less fastened together by a bar K, K, and a bar at R, R, with handles attached behind, A, A, and runners marked D, D, D, D, D, in the drawing aforesaid. There is a small frame to work inside of the large one as represented in the accompanying drawing No. 2, the forward ends of which are fastened by a screw or bolt to the second finger from the sides of the large frame—the arms of which are marked S, S, in the drawing last aforesaid with handles behind. E, E, fastened into the cross bar H, H, as represented in drawing No. 3, which small frame is strengthened by braces as represented at V, V, in said drawing No. 3. There is a divider F, F, with a convex front, when raised the bar of which is fastened to the middle finger by a bolt or screw at W. To the hind end of the bar of this divider is attached by a bolt or screw a stirrup marked N, on said drawing No. 6. The lower end of this stirrup is attached by a bolt or screw to the fore end of the lever G, as represented in the drawing last aforesaid. There is a bar U extending downward from the middle finger immediately under the cross bar R, R, to the lower end of which the lever G, is attached by a bolt as represented in said drawing No. 6. The hind end of this lever works loosely in an eye or mortise in the cross bar H, H, at K Fig. 3. The feet of the small frame are attached to the ends of the cross bar H, H, by bolts or may be formed at the ends of an iron rod I, I, bent down at the ends and running through an eye at the lower side of each end of the bar H, H, as represented in drawings Nos. 3 and 4, at I, I, I, I. The large frame is strengthened by braces attached to the inside of the handles A, A, and the cross bar R, R, which braces are represented at T, T, in drawings Nos. 1 and 2. There are also braces L, extending from the outside fingers downward and backward to near the lower end of the handles A, A. There is a guard plate of sheet iron or other metal attached by screws or bolts to the right side of the middle finger as represented at M, M, in drawing No. 6 extending from about one inch forward of the knuckle a sufficient distance back to allow the bar of the divider to work without obstruction, leaving a space between the plate and finger equal to the thickness of the divider. The handles A, A, are to extend down eight inches from the top of the cross bar K, K and the feet of the small frame I, I, are to extend down eight inches below the feet of the handles A, A. The handles A, A, may be made of such length above the cross bar K, K as may be adapted to the height of the man who is to use it. The two outer fingers are to be mortised into the handles A, A, eight inches above the feet of the handles. All the inner fingers are mortised into the cross bar K, K, about nine inches apart. The fingers B, B, B, B, B, may be of any length desired but the most convenient length is three feet from the bar K, K, to the kunckle at P, P in drawing No. 2, and two feet from the knuckle forward to the points. The cross bar R, R, should be inserted through mortises in the fingers one foot forward of the bar K, K, and fastened by a bolt through each finger. The fingers from the knuckle forward to the points incline downward four inches to the foot and forward of the knuckles are made of steel with the upper edges sharp from the points back two-thirds of the distance to the knuckles. If the fingers from the knuckles back are made of wood then the fore part of them are attached by bolts at P, P. The runners are made of steel with one end welded to the points of the fingers and the other end welded to the fingers eight inches back of the knuckle and of such curve that a perpendicular drawn from the top of the knuckle to the base of the runner will be one foot long and the curve from the point of the runner back to the perpendicular is but one inch when the fingers are two feet long from the knuckles to the points. The rake is to be used by hand and by one man walking between the handles A, A, and pushing it before him in the swath and when the rake is filled or sufficiently loaded by setting it down the feet of

the small frame strike the ground first and throw the arms of the small frame up which elevates the point of the divider and separates the grain at the knuckles of the fingers allowing the grain behind the knuckles to be bound in sheaves without obstacles from the stubble or otherwise and preventing the loss of any grain and rendering the grain so gathered more easily threshed with a machine on account of the straws being more even and less tangled than is the case in ordinary raking, and by the use of this rake the grain is all collected without loss and one man can rake and bind as fast as two in the ordinary method.

What we claim as our improvement and desire to secure by Letters Patent is—

The combination of the divider (operating as set forth) with the small frame, in the manner described; also the sharp edges of the fore part of the fingers by means of which the small vines and grass in the stubble are cut and prevented from obstructing the progress of the rake.

JOHN M. BROWN.
BENJAMIN B. BROWN.

Attest:
JOHN J. WILLIAMS,
JOSEPH J. WILLIAMS.