

Vol. V.—No. 8.

AUGUST, 1877.

Price in Canada \$2.00 per An United States - \$2.50

## CONTENTS.

INVENTIONS PATENTED	113
INDEX OF INVENTIONS	CXXIII
INDEX OF PATENTEES	CXXIV
ILLUSTRATIONS	125

## INVENTIONS PATENTED.

## No. 7545. Improvements on Fanning Mills.

(Perfectionnements aux tarrares.)

Charles Saunders, Cape Vincent, N.Y., U.S., 11th June, 1877, for 5 years.

Claim.—1st. The combination with the hopper A having passages B of the shoe C connected at the upper end to the vibrating chaffing shoe and suspended adjustably at the lower end by the cord F; 2nd. The combination of the vertical crank shaft I, bottom crank shaft M, connecting rod N and pitman W, with the independent shaking screens E G H and the fan shaft; 3rd. The combination of the sliding posts S U, carrying rollers T N and the levers K L, with the screen shoes G I.

## No. 7546. Improvements on Grain Threshing Machines.

(Perfectionnements aux machines à battre les grains.)

Jonathan Brown, Malahide, Ont., 11th June, 1877, for 5 years.

Claim.—The blocks A G and D, the latter having a sliding extension E applied to a grain thresher for adapting the same to thresh clover and grass

### No. 7547. Improvements on Fluting and Sad Irons.

(Perfectionnement aux fers à tuyauter et à repasser.) William I. McCausland, Dallas, Texas, U.S., 18th June, 1877, for 5 years.

William I. McCausiand, Davas, 1exas, U.S., Join June, 1011, 1013 years.

Claim—1st. A hollow sad iron having one side arranged to form a door, for the insertion and removal of the heating block; 2nd. A hollow sad iron having a hinged side E provided with the fluting surface c; 3rd. The hollow sad iron A having the detachable hinged side E with fluting surface c and the perforations f in its rear end, in combination with the provided handle c and spring lever D having spure; 4th. In combination with the hollow sad iron A, the hinged detachable ancular boilt surface c and pin engaring with the detachable angular boilt surface c. gaging with the detachable angular bolt F

## No. 7548. Improvements in Stone Sawing.

(Perfectionnements dans le sciage de la pierre.)

Benjamin C. Tilghman, Philadelphia, Pa., U.S., 11th June, 1877, for 5 years.

Claim.—The use of solid or undissolved lime, magnesia, or other alkali, in combination with grains or globules of iron or steel, or their alloys, in the cutting, sawing, boring and grinding of stone, glass, pottery and similar hard

# No. 7549. Method of Manufacturing Fulled Raw Hides.

(Mode de préparation des peaux vertes foulées.)

John A. J. Schultz, Saint Louis, Mo., U.S., 11th June, 1877, for 5 years. Claim .- Liming, buting and drying the hides and then fulling and stuffing.

#### Apparatus for Forming Heel No. 7550. Counters.

(Appareil à former les contreforts des talons.)

Etienne Salomon, Montreal, Que., 11th June, 1877, for 5 years.

Claim.—1st. In any machine for making heel counters, the operation by means of thee joints of the arms or rods which give motion to the dies; and. The combination of an apparatus for feeding automatically to each mould the blank to be stamped into a counter; 3rd. A frictional driving gear

so arranged that it will be stopped by any jam or blocking of the machine; it. The combination of a device for throwing off from the die the finished counter; 5th. The die pivoted to the die block and descending into place after entering the mould; 6th. A heel counter forming apparatus performing automatically, in succession, the four operations of feeding the blanks to the moulds, pressing the counters into shape, making the urturn and finishing the counter, and withdrawing the finished counter from the mould and throwing it off the die.

#### No. 7551. Machine for Sharpening Mower Knives.

(Machine à aiguiser les couteaux des faucheuses.)

Frederick J. Henry, St. Catharines, Ont., 11th June, 1877, for 5 years.

Claim.—1st. The platform A with the holes B and C and the screw E; 2nd. The knife frame G with the screws I K, the wooden springs, the iron braces L and the groove M.

## No. 7552. Artificial Stone. (Pierre factice.)

Llewellyn L. Leathers, Oakland. Cal., U.S., 11th June. 1877, for 5 years.

Claim—lst. Moistening a mixture of sand and cement with a liquid consisting of a mixture of the aqueous solution of borax, kaolin and sulphate of barium, and an alcoholic solution of sulphur; 2nd. A compound of sand and cement moistened with a liquid consisting of a mixture of the aqueous solution of borax, kaolin and sulphate of barium, and an alcoholic solution of sulphur: holic solution of sulphur.

## No. 7553. Improvements on Horse Collars.

(Perfectionnements aux colliers de cheval.)

Marshall Turley, Council Bluffs, Iowa, U.S., 11th June, 1877, for 5 years.

Claim.—1st. A horse collar wherein the pads do not meet each other at their lower ends, and are combined with a hame rim having a rope foundation extending between the ends of the pads, for rendering the collar flexible; 2nd. The pads A A adjustable upon a flexible rim C; 3rd. The combination of the flexible rim C, adjustable pads A A, straps D D and lacing a; 4th. The loop G, in combination with the flexible rim C and adjustable pads A A.

#### No. 7554. Gearing for Waggons and Other Vehicles.

(Train de wagons et autres voitures.)

Lorenzo D. Hurd, Wellsville, N.Y., U.S., 11th June, 1877, for 5 years.

Claim-1st. The combination of the short axles O which may be solid or Claim—lst. The combination of the short axies O which may be solid or hollow, but if hollow with a rod, the ends of either being represented by Q and the brace arms R, and their nuts with the pivoted axies O and the arms S; 2nd. The combination of the plate or frame U and the pivoting bolt V with the cross bar T, the pivoted axies O and the king bolt passing through the bolster H, the head blocks G and the bar M: 3rd. The bars or false bolsters Z and blocks Z and the hollow base metallic stakes Z3, in combination with the bulsters C and blocks D. with the boisters C and H; 4th. The combination of the reach made in two parts E F and provided with the eye-bolt and lugs  $e^1$  and  $f^1$ , and the hook and eye  $e^2f^2$  with the rear bolster axle and hounds, and forward bolster head block and hounds.

### No. 7555. Belting Leather and Leather Stuffing and Fulling Machine.

(Cuir à courroies et machine à bourrer et fouler le cuir.)

John A. J. Shultz, St. Louis, Mo., U.S., 11th June, 1877, for 5 years.

John A. J. Shuitz, St. Louis, Mo., U.S., 11th June, 1877, for 5 years. Claim.—1st. Leather having tanned surfaces and an interior of pliable raw hide; 2nd. The described process of manufacturing leather; 3rd. The combination of the trough A, shaft B and clamp b; 5th. The combination of the trough A, shaft B, followers E E and device L L; 6th. The combination of the trough a, and pipe F, arranged outside and independent of the trough a, and pipe F, arranged outside and independent of the trough a. The combination of the lever a, slide R, nut a and arm a; 8th. The combination of the wheel G, pinion P, shaft N, nuts a, arms a and lever a, 9th. The combination of the cylinder A, shaft B, clamp a and ribs a C C; 10th. The combination of the clutch a a, a, a and a pring a; 11th. The combination of the clutch a a, collars a a, and spring a; 11th. The combination of the clutch a a, collars a a, a, a and seriew rods a.