

Vol. V.-No. 4.

APRIL, 1877.

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

CONTENTS.

INVENTIONS PATENTED	55
INDEX OF INVENTIONS	NYXXXVII
INDEX OF PATENTEES	XXXXVIII
ILLUSTRATIONS	65

INVENTIONS PATENTED.

No. 7170. Improvements on Horse Rakes.

(Perfectionnements aux râteaux à cheval.)

Thomas Galloway and John Larsen, Oshawa, Ont., 1st March, 1877, for 5

Claim .- Ist. Eccentric dog J, or its equivalent, pivoted upon the bracket E, in combination with the slore K fitting into the groove L cut in the hub of the wheel A; 2nd. The clutch M bolted to the bracket P, in combination of the wheel A; 2nd. The clutch M bolted to the bracket I', in combination with the groove L, cut in the hub of a wheel A revolving upon the axletree and B; 3rd. The shoe K wedged into the groove L by the eccentric dog J in combination with the clutch or stop M: 4th. The foot lever Q working within the clongated staple R and provided with the double craws O, in combination with the chain or rope P connected to the cranked rod N, for the purpose of operating the dog K, 5th. The brackets I' E bolted to the axletree C and supporting the staple bar D, in combination with the brackets I' E bolted to the axletree C and supporting the staple bar D, in combination with the brackets I' E bolted to the axletree C and supporting the staple bar D, in combination with the brackets I' E bolted to the axletree C and supporting the staple bar D, in combination with the brackets P pivoted upon the axietree study B B and supporting the shaft G; 6th The teeth II having booked ends, in combination with the brackets I bolted to the back of the axletree C.

No. 7171. Folding Washstand.

(Laxemoun brise.)

Sidney Kinder, Amherst, N. S., (Assignee of David O. Parker,) 3rd March, 1877, (Extension of Patent No. 1357), for 5 years.

The three detachable hinged pieces A at and the shaft B bi, said parts A at B bt being constructed and arranged, as described.

No. 7172. Improvements in Sparks Arresters.

(Perfectionnements aux arrête-flammèches.)

Frank M. Stevens, Concord, N. H., Henry G. Holines, New York, and John A. White, Concord, N. H., U. S., 6th March, 1877, for 5 years.

Claim .- 1st. The combination of the elbow pipe G ats partition I, the two branch educts K K and the conduit E to be used with a chimney and spark receiver; 2nd. The steam jet tube h in two sections coupled and provided with a top cock K. in combination with the buffer A and the spark receiver C hinged together and provided with the chief f 3rd. The spark receiver C broided with a receiving mouth 1 (separate from the conduit E for the discharge of sparks into such receiver), and hinged or applied to the open pid of the smoke-box B so as to be removable therefrom and the conduit E, such open end of the smoke-box being provided or not with a head; 4th. The combination of the spark receiver C and its discharge channey or chimneys D with the smoke-box B, the chimney H, the chlow pipe G and its three clusts E K K.

No. 7173. Combination of Processes for Making Syrups.

(Combinaison de procédés pour faire des sirons.)

Hugh W. Walker and Thomas L. Patterson, Greenock, Scot., 6th March, 1877, for 5 years.

Claim.—1st. The clear, bright fruit flavoured syrups made from the residual sweet liquids of syrups cotained in manufacturing or refining sugar the sweet liquids or syrups to up treated with a solution of a suitable substance such as an alkaline's least or a solution of a sintance such as an alkaline's least of all mina, which substance is subsequently procupited and with unpurines removed by filtration whilst the syrings are couled capably after concentration and have finit like escences confined with them 2nd Clear bright syring made from the residual sweet liquids or syrings obtained in manufacturing or

refining sugar, the sweet liquid or syrups being treated with a solution of a suitable substance, which is subsequently precipitated and with impurities removed by filtration, whilst the syrups are cooled rapidly after concentration; 3rd. Clear, bright syrups made from sanable sweet liquids or syrups. and prevented from becoming dim or furbid by being rapidly cooled after concentration, 4th. Fruit flavoured syrups made from suitable sweet liquids or syrups by combining therewith natural or artificial fruit essence or truitlike essences.

No. 7174. Improvements in the Manufacture of Porcelain.

(Perfectionnements dans la fabrication de la porcelaine.) Abel d'Estampes, New Orleans, La., U.S., 6th March, 1877, for 5 years,

Claim.-Artificial kaolin when formed of shells, whote sand and felds-

No. 7175. Improvement on Collars for Gar-

ments. (Perfectionnement des callets d'halats.)

George Farewell Salem Mass U S (Assignee A Alberta Riley), 6th March, 1877, for 5 years.

Claim.—The detachable collar A consisting of parts a,b and having holes k for coats, sacques, capes and similar other garments.

No. 7176. Improvements on the Manufacture of Steel.

(Perfectionnements dans la fabrication de l'acier.)

Alfred B. Mullett, Washington, D. C., U. S., (Assignee of Julius Baur), 6th March, 1277, for 5 years.

Claim.—The combination with the steel-making iron, in suitable proportions, of an alloy of chromium, manganium and iron, or of the requisite proportions of ferro-chromium and ferro-manganium.

No. 7177. Improvements on Semaphore

Signals. (Perfectionnements aux signaux semaphores.) Francis Culham, Beverly, Ont., 8th March, 1877, for 5 years.

Claim.—The combination of the endless were H H, signal arm A, shaft B-pulleys C C and pulley G.

No. 7178. Process for Making Oakum.

(Procédé pour faire de l'étoup^e.) William E Geet Chicago III U. S., (Assignée of Charles M. Winter,) eth March, 1877, for 5 years.

laim.-The process of making oakum by using a solvent made of sat soda or sim far alkali and hime dissolved in water for cutting and holding in solution the far and asphaltum with which the libre is saturated, and cleansing of the said fibre with the acid solution.

No. 7179. Improvements on Nail Machines.

(Perfectionnements aux machines a clou.)

Isaac Briggs, Middleborough, Mass., U. S., 8th March, 1877, for 5 years.

Claim .- 1st. In a feeding device for a nail machine the cam C bar 12 and lever Ct. 2nd. In a feeding mechanism for a null machine the plate L. levers M M², shafis 15 K5, rod K1, lever q and cam K, 3rd. In a feeding mechanism for a nail machine the barrel D², plate D¹, plate H, cords E, rod H3. levers II1 II2, and rod C1.

No. 7180. Improvements on Trusses.

*Perfectionnements aux bandages hermaires.

Philip Werum, Stryker Ohio, U. S., 8th March, 1877, for 5 years.

Claim—1st A truss pad composed of interlocking sections longed together to form a safe receptable for valuables 2nd The stotted back section having the lutton secured thereon between the slots 3rd The combination of the pad its slotted back the button mounted thereon between the stots and the strap provided with a button hole and adjustable buckle whereby the pad is rendered adjustable and adaptable to either side of the body or to persons of different size, and one button fastens both ends of the strap.