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LIST OF PATENT CLAIMS

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FOR THE WEEK ENDING SEPTEMBER 21, 1852.

ALARM TIME PIECE FOR LIGHTING LAMPS—By Wm. H Andrews, of Cheshire, Ct., and R. T. Andrews, of Plymouth, Ct: We claim the use of a revolving vertical section of a cylinder, when combined with a spring to revolve it, when these are combined with the appropriate levers, and connected with the alarm wheel of an alarm time piece, by an appropriate connecting rod, for the purpose of lighting a lamp, in connection with the alarm given by an alarm time-piece, when the whole is constructed, combined, and arranged, substantially as described.

TUNING PEGS FOR GUITARS, &c.—By James Ashborn, of Wolcottville, Ct.: I claim making the tuning pegs of guitars, and other like stringed instruments, with the journal part of a much greater diameter than the barrel on which the string is coiled, substantially as specified.

CARVING MACHINES—By C. E. Bacon, of Buffalo, N. Y.: I claim the folding frame and wheels, or pulleys, constructed substantially as described, in combination with the double cross sliding ways, and vertically sliding cylinder or tracer, for the purpose of tracing from patterns, or other device, in the manner specified.

COATING IRON WITH COPPER—By T. G. Bucklin, of Troy, N Y.: I claim, first, coating cast malleable or wrought-iron with copper, or any of the alloys of which copper forms a part, by employing a coating of zinc, or zinc and tin, to cover the iron, as a positive medium to make the molten copper, or its alloy, adhere to the iron, in the manner substantially as described.

Second, I claim the employment of an infusible or partially infusible substance, or substances, especially the fluoride of calcium, as a wiper and non-conductor, as set forth.

HAND DRILLING MACHINE—By Reuben Daniels, of Woodstock, Vt.: I claim the combination of the geared mandrel, which elongates to feed the drill, with the arm that projects from the sleeve, to steady the gearing, and the slot in the stock, to guide and steady the arm, while traversing therein, to permit the drill to be advanced and withdrawn, as set forth

HORSE COLLARS—By J. H. Hall & John Lowrey, of Wheeling, Va.: We claim the construction and arrangement of the two sides of the collar, so that they fit together, and can be moved towards and from each other by a parallel motion, to diminish or enlarge the aperture for the horse's neck, and then be fastened by a set screw, or its equivalent, to form a rigid frame, substantially as described.

PORTABLE WARDROBES—By S. L. Hobart, of Hingham, Mass.: I claim a wardrobe susceptible of dismemberment with the parts held together, by means of the sliding bolts, which fit into sockets, and the notched studs which fit into the grooves, the top piece preventing the back from slipping by the bolts, and the sides being prevented from slipping by the projecting pieces, which press the braces forward, and keep the studs pressed forward, as described.

MACHINERY FOR BEVELLING THE EDGES OF SKELPS OR METALLIC STRIPS, etc.—By R. Knight, of Cleveland, O.: I claim arranging the rollers in the frame, so as to receive a lateral movement, as may be desired, in other words, giving the rollers end play, one over the other, as thereby increasing or diminishing the distance between the bosses, according to the width of the plate or strip, and providing suitable means for retaining the same in place.

RAKES—Amza B. Lewis, of Brooklyn, Wis.: I claim the combination of the slotted swinging arm, with the slotted rake handle and crank, as described, for moving the cut grain from the platform.

PAPER CUTTING MACHINES—By James E. Mallory, of New York City: I claim the arrangement of the movable platfo m and sliding clamp, as described, in combination with the vibrating knife, as described.

CRAYON RUBBER—By D. F. Pond, of New Haven, Ct.: I claim the crayon rubber, made in the manner set forth, for the purpose of applying and blending the crayons in the bichromatic and other kindred styles of drawing.

FREE JOINT TUBE—By Richard Prosser, of Birmingham, England (assignor to Thos. Prosser, of New York City.) Ante-dated May 31, 1852: I claim the application of the improved metal tube, made in the manner and for the purposes described, that is to say, of a metal tube with a free joint, neither welded nor brazed, to boilers of steam engines or other vessels requiring metal tubes of such a character as to resist external pressure effectually.

GALVANIC CLOCKS—Moses G. Farmer, of Salem, Mass. (assignor to himself and Chas C. Coffin, of Boscowen, N. H.): I claim the combination of the impulse spring and the pallets, respectively connected with the armature of the magnet and the pendulum, and made to operate together, and to make the pendulum operate or impart impulse to it, substantially as described.

DESIGNS.

CAMERA STAND—By W. A. Allen, of New York city.

WIRE FENCE—By Francis Kilborn, of Lancaster, Pa.

COOKING STOVE—By Orin W. Andrews, of Providence, R. I. (assignor to Isaac Backus, of Canterbury, Ct., and J. P. Barstow, of Norwich, Ct.)

Bird Killed by a Telegraph Wire.

A small bird, of a species unknown to us, was brought to us, says the Pittsburg Union, by a friend, it having been killed on the telegraph wire, near St. Mary's Cemetery, beyond Lawrenceville. The bird alighted on the wire at a spot where a connection had been made by wrapping or twisting, in the usual manner, one end of the wire being left pointed upwards, on which the bird sat. Almost instantly it was observed to fall. The gentleman who noticed this, went to the bird and picked it up. In its breast he found an oblong punctured hole, from which the blood was flowing, large enough to admit a small sized pea, which had doubtless been made by the passage of the electric fluid from the point of the wire into the breast of the bird, thereby causing its death.

Recent Foreign Inventions.

MANUFACTURE OF PAPER FROM BARK.—Jean Theodore Coupier, and Marie A. C. Mellier, of Maidstone, Eng., Patentees.

The first part of this invention consists in manufacturing pulp for paper-making from straw and other similar vegetable matters, and from the bark of the osier or chestnut-tree, by the use of a boiling solution of hydrate of soda or potash, in conjunction with other chemical means, and without mechanical operations.

The patentees conduct their processes as follows:—They make use of an open vessel with a perforated false bottom, on which are placed the materials to be operated on, previously cut or otherwise divided into short lengths. From the top of this vessel (which is to be closed while the operation is proceeding) a pipe leads to a second vessel capable of holding from 60 to 70 gallons, in which is placed the alkaline solution, and which is employed at a strength of from 7° to 10° Baume. The end of the pipe in the first vessel is provided with a rose-head. When the process is to be commenced, steam is to be turned on into the alkaline solution, and its temperature raised to the boiling point. An excess of steam is then admitted, and the solution forced through the pipe, and dispersed in a shower over the straw; when the solution is exhausted in this way, a fresh supply is introduced, and this operation repeated. A communication is established between the vessels by another pipe from underneath the false bottom of the first, and a circulation of the heated liquor is thereby maintained for about eight hours. Hot water is then forced through, and this washing is continued until the liquor comes off of a strength of about 1° Baume. Cold water is then supplied to the materials, and passed through until it comes off clear. In order to bleach and disaggregate the fibres, they are then submitted to the action of a solution of hypochlorite of alumina or other hypochlorite, of a strength of about 3° Baume, and again washed in hot water in order to remove the superfluous bleaching liquid. This reduces the mass to the condition of half stuff which is manufactured into paper according to the usual modes operating with or without the addition of rag pulp. The quantity of alkaline solution consumed by the above process will be about thirty to forty gallons for every hundred weight of fibre, and of hypochlorite about 25 per cent. of the weight of fibre. The hydrate for the alkaline solution may be obtained by dissolving soda or potash in lime water, and decanting the clear liquor; and the hypochlorite of alumina for the bleaching process by dissolving sulphate of alumina in a solution of hypochlorite (common chloride) of lime. The waters obtained by the first process when evaporated, yield a resinous soap, which may be mixed with other materials, and burnt as fuel, or used in the unmixed state.

The above process is applicable also to flax waste, cotton waste, hemp, tow, &c., but does not supersede the necessity of first converting these materials into half stuff.

The second part of the invention consists in treating wood shavings (pine, ash, elm, and beech are suitable for this purpose) with nitric acid in order to obtain therefrom a pulp to be used in the manufacture of paper.

In carrying this part of the invention into effect, the patentees employ two vessels in connection with each other, having perforated false bottoms on which the shavings to be operated on are placed in a damp state, and pressed. About 80 per cent. by weight of white nitric acid (of a strength of 36° Baume) diluted to about 5° or 6° Baume, is then added to the shavings in one of the vessels, and after standing about four hours, heat is applied until ebulition commences, and nitrous fumes are evolved. These fumes are caused to pass into the second vessel, where they come in contact with the damped shavings, and are partially converted into hyponitric acid. When the boiling has been continued for a sufficient time, the shavings are subjected, for about two hours, to the action of solution of hydrate of potash or soda, of a strength of about 2° Baume, in the manner before described, are washed, and they are then bleached by hyphchlorite of alumina, using, however, only about two per cent. by weight of the materials in making the solution. This last operation, with the aid of subsequent washings, converts the shavings to a state of half stuff, which may be used alone or with rag pulp, according to the usual methods. The acid liquor employed in operating on the first batch of shavings, after having about 40 per cent. of the weight of the materials added to it, is used for treating another quantity, the nitrous fumes evolved being applied as before described. By evaporating the used acid liquors, oxalic acid may be obtained, as well as an acid of a character analogous to nitropieric acid.

Curious Experiment in Wool Growing.

In a lecture recently delivered by Mr. Owen at the Society of Arts, the learned professor detailed the particulars of a highly interesting experiment, which resulted in the establishment of one of the very few instances in which the origination of a distinct variety of domestic quadruped could be satisfactorily traced, with all the circumstances attending its development well authenticated. We must premise it by stating that amongst the series of wools shown in the French department of the Great Exhibition, were specimens characterized by the jury as a wool of singular and peculiar properties; the hair, glossy and silky, similar to mohair, retaining, at the same time, certain properties of the merino breed. This wool was exhibited by J. L. Graux, of the farm of Mauchamp, Commune de Juvincourt, and the produce of a peculiar variety of the merino breed of sheep, and it thus arose:—

In the year 1828, one of the ewes of the flock produced a male lamb, which, as it grew up, became remarkable for the long, smooth, straight, and silky character of the fibre of the wool, and for the shortness of its horns. It was of small size, and presented certain defects in its conformation, which have disappeared in its descendants. In 1829, M. Graux employed this ram with the view to obtain other rams, having the same quality of wool. The produce of 1830 included one ram and one ewe, having the silky quality of the wool; that of 1831 produced fours rams and one ewe with the fleece of that quality. In 1833, the rams, with the silky variety of wool, were sufficiently numerous to serve the whole flock. In each subsequent year the lambs have been of two kinds—one preserving the character of the ancient race, with the curled elastic wool, only a little longer and finer than in the ordinary merinos.

The other resembling the rams of the new breed, some of which retained the large head, long neck, narrow chest, and long flanks of the abnormal progenitor, whilst others combined the ordinary and better-formed body, with the fine silky wool. M. Graux, profiting by the partial resumption of the normal type of the merino in some of the descendants of the malformed original variety, at length succeeded, by a judicious system of crossing and interbreeding, in obtaining a flock, combining the long silky fleece with a smaller head, shorter neck, broader flanks, and more capacious chest. Of this breed the flocks have become sufficiently numerous to enable the proprietor to sell examples for exportation. The crossing of the Beauchamp variety with the ordinary merino has also produced a valuable quality of wool, known in France as the Mauchamp Merino.

The fine silky wool of the pure Mauchamp breed is remarkable for its qualities, as combining wool, owing to the strength as well as the length and fineness of the fibres. It is found of great value by the manufacturers of Cashmere shawls, being second only to the true Cashmere fleece in the flexible delicacy of the fabric, and of particular utility when combined with the Cashmere wool in imparting to the manufacture qualities of strength and consistence, in which the pure Cashmere is deficient. Although the quantity of the wool yielded by the Mauchamp variety is less than in the ordinary merinos, the higher price which it obtains in the French market—25 per cent. above the best merino wools—and the present value of the breed, have fully compensated M. Graux for the pains and care manifested by him in the establishment of the variety, and a council medal was awarded to him.

The Koh-i-Noor.

This celebrated diamond, which created such a sensation for a period in the Great Exhibition, was found to be very improperly cut, and did not exhibit half of its beauty. Consultation with the Queen, Prince Albert, and eminent scientific men were had, to see if it could not be safely re-cut and improved. All the diamond cutting in the world, it seems, is done in Holland, by eminent and long practiced lapidiaries, and the most famous of them a person of the Jewish persuasion, was sent for, and consulted about the safety and certainty of cutting the famous "Mountain of Light." He decided that it could be done, and he was forthwith employed to do it.—With another artizan he erected his machinery some time ago, and commenced his tedious, tender, and peculiar operations. By late news from Europe we learn he concluded his labors on the 7th of last month. Two small diamonds were cut from the large one, and all properly polished with diamond dust. It is now unsurpassed by any diamond above the ground in shape, lustre, and beauty. The large gem having left the hands of the artizans employed for the purpose, they have received from the hands of their employer, Mr. Garrard, the Queen's jeweller, a piece of silver plate, with a model of the Koh-i-Noor in the centre, and bearing the following inscription:—"Presented by Mr. Garrard to Mr. Fedder and Mr. Voorzanger, in commemoration of the cutting of the Koh-i-Noor. Commenced on the 16th July, and finished on the 7th September, 1852."

Prevention of Salivation.

"I wish to communicate a fact to you that has recently fallen under my observation, which may be of some interest to the profession generally. All physicians are aware of the salivating effect of calomel, and of the inconvenience that arises from sore mouths and other irritating complaints that affect the patients. I have had several persons under my care, to whom I have been obliged to administer calomel, which I have mixed with supercarbonate of soda, in the proportion of about twice the amount by weight of soda. To one patient in particular, whom I have attended for about ten weeks, I have given three grains of calomel with six grains of soda daily for five weeks, besides administering it frequently during the rest of the time. As yet he has not suffered at all from the salivating effect of the calomel, which has nevertheless been very beneficial to him. Is it possible that these were all persons not susceptible to salivation? Or is the absence of salivation to be attributed to the supercarbonate of soda." DR. STEARNS.

[Charleston Mercury, S. C.

Girdled Trees.

A correspondent of the Genesee Farmer says that girdled trees may be preserved by the following means:—

"Take out a block of wood extending above and below the girdle, and take from the body or limb of another tree a block corresponding in size and shape, with the bark on, and adjust it in the place, and bind it there, on the principle of engrafting." This plan, it is said, has proved entirely successful.

Hemp.

The law recently passed by Congress, requires that all hemp carried on board steamboats, shall be baled and covered, thus giving additional security against fire on board of boats.

In the course of forty-eight hours, closing with Sunday, September 26, the extraordinary amount of 4,939 emigrants arrived at this city, in seventeen passenger vessels, from foreign ports. All but 5,000 emmigrants in 48 hours. As Dominie Sampson would say, "Prodigious."