

**Patent Law Reform in England.**

At a recent meeting of the British Association at Glasgow, a paper was read "On Recent Attempts at Patent Legislation," by Mr. St. John Vincent Day. In the discussion which followed, Mr. F. J. Bramwell spoke at some length. It seems to be thought, he said, that lawyers have a special claim to dominate in patent legislation, perhaps on account of the great gravity of the legislation which arises out of patents. This notion of excessive litigation in reference to patent matters is absolutely unfounded. An eminent barrister connected with patent litigation, when it does arise, had assured Mr. Bramwell that on an average of many years only nine patent actions or suits go to the stage of a primary decision in each year; and an examination of the files of the *Times* for the year ending November, 1874, showed the accuracy of the statement which had been made. Mr. Bramwell then proceeded to the question of the official examinations into novelty and frivolity. He had long had very great doubts whether it is desirable to make an examination even into novelty; but if such an examination be made, the very first care must be to appoint a sufficient number of men of scientific attainments or of good experience. This is a difficult task in itself; even when the greatest care has been taken, it is certain that some mistakes will be made, and some hardships will be suffered, and we have to consider whether the advantages to be attained are sufficient to justify the risk. After all, what is the benefit to be derived from an examination into the novelty of an invention? Sometimes, it is said, it is to protect the inventor. The answer to that is that, if you make the inventors into classes separate from the community at large, the inventor says: "For heaven's sake, leave us alone; we not need to be protected against ourselves." But others put the desirability of the examination into novelty on broader grounds. They say it is undesirable that a patent should be granted for a thing which is not new, because the public may thereby be prohibited from using something which the patentee claims as his invention. The answer to this is that a patent granted for a thing which is not new is, if not void, voidable, and then in truth a very small amount of harm results. Mr. Bramwell then went on to illustrate his meaning by reference to the inventions of James Watt, Dr. Potts (the inventor of the method of driving piles by the exhaustion of the air), and Dr. Siemens, all of whom he urged would, probably, have been refused a patent, by the examining body. It appeared certain that we should not have an examination as to frivolity; and if we were to have an examination as to novelty, that examination should be fenced with precautions to prevent an inventor being injured by a wrongful decision. It was recommended by the committee of the Society for the Amendment of the Law that a patentee should have, notwithstanding the adverse report of the examiner, a right to demand his patent if he still so pleased, but that the specification should have appended to it the decision of the examiner, and that any person bringing an action under such a patent should be compelled to give security for the costs; and that in the event of his failing, and failing on the grounds put forward by the report of the examiner, he should pay the whole costs of his opponent as between solicitor and client, and not the mere taxed costs. Some protection such as this against the mistake of novelty examiners was absolutely necessary.

REMARKS.—In this country we have had the system of official examination in vogue for forty years; and if it were possible for Englishmen to learn anything, they might profit from our experience. In the early days of our system, it was the common practice of the Patent Office to reject even highly meritorious inventions; just as they now do at the Prussian Patent Office. But that method gave great dissatisfaction, and was so discouraging to inventors, and so obviously contrary to the spirit of the Constitution, that it had to be abandoned. At present the examinations are substantially limited to the ascertainment of identities of inventions. If the invention for which a patent is asked is identical with one already patented, the petition is rejected. If there is an iota of difference, the new patent is allowed. This is the only safe rule to follow; it works well, and gives satisfaction; except in cases where the examiner is so stupid as to be unable to see the difference between tweedle-dum and tweedle-dee. Property in patents never commanded such high valuations here as at present, notwithstanding the fact that the number of issues, now nearly 15,000 a year, is steadily increasing. The Supreme Court of the United States taught our patent officers a good lesson concerning the necessity of liberality to inventors, when it forbade the practice of citing old rejected cases against new applicants. This decision so limits the scope of official examinations that they are of no special importance now, if indeed they ever were; and nobody would be hurt if the system were abrogated. We agree with Mr. Bramwell that a patent granted for an old invention is good for nothing, and the issue of such a patent does very little harm.

**Chromic Inks.**

As long ago as 1848, Professor F. Runge invented what he called a chromic ink, from its containing chromate of potash. His directions for its preparations, published at the time in *Dingler's Journal*, were as follows; A decoction of logwood is first made in the proportion of 10 to 80, that is 10 lbs. of logwood is boiled with enough water to produce 80 lbs. of the decoction. To 1,000 parts of this logwood extract, when cold, is added 1 part of yellow chromate of potash, stirring rapidly. It is ready for use at once. Gum and other additions are injurious, he says, to this ink.

The following year W. Stein proposed an improvement on Runge's ink, saying that the great fault of this ink was that it soon became thick, like sour milk. This he overcame by adding four grains of corrosive sublimate to each bottle.

This would restore thick ink to its pristine quality, and improve its color changing it from deep indigo blue to pure black.

In 1867, C. Puscher described a new ink similar to the above, made as follows: Boil 10 ozs. of logwood in 20 ozs. of water, then boil again in 20 ozs. more of water, and mix the two decoctions; add 2 ozs. of chrome alum and boil another quarter of an hour. One oz. of gum arabic is added, and we have 25 ozs. of deep black ink.

Böttger says that a simple method of preventing gelatinizing in chromic ink is to add to the water in which the extract is made some carbonate of soda. His method of operation is as follows: Dissolve 15 parts of extract of logwood in 1,000 parts of distilled water to which 4 parts of carbonate of soda has been added at boiling heat, and add 1 part of yellow chromate of potash dissolve in a little water.

**Recent American and Foreign Patents.****NEW MECHANICAL AND ENGINEERING INVENTIONS.****IMPROVED SHOVEL-GRINDING MACHINE.**

William A. Meyer, North Easton, Mass.—This consists of a series of swinging shovel-blank-supporting frames, that are journaled in a shaft placed on pivoted and spring-acted standards. The blank holding frames and standards are supported on a traversing carriage that feeds the blanks successively to a rapidly revolving and adjustable grindstone, that grinds the entire surface of the blanks. There is a revolving eccentric cam, supported on a pivoted and sliding carriage, which is capable of being moved toward or from the shovel frames, as required, by the articles to be exposed to grinding.

**IMPROVED BOAT-DETACHING APPARATUS.**

William A. Brice, London, England.—This detaching apparatus remains intact and locked as long as there is strain on the suspended rings, but is instantly released when the strain is taken off by the raising of the boat by the wave. It was described and illustrated on page 150, volume XXXV.

**IMPROVED MACHINE FOR SAWING STAVES.**

Benjamin H. Catching, Forest Grove, Oregon.—A band saw, or a saw of similar form in two parts, is fitted on an oscillating circular head, on each side of which is a saw table and feed carriage. The carriages are worked by weighted cords, and the saw tables have grooves in the under side for gagging the work to the saw, the guide being shifted from groove to groove as each stave is sawn off. A special advantage is that one part of the saw cuts while the other part is on the back stroke.

**IMPROVED REVOLVING EARTH SCRAPER.**

Benjamin Slusser, Sydney, Ohio.—This invention relates to certain improvements in revolving earth scrapers designed for general purposes of excavating and moving dirt; and it consists in the particular construction and arrangement of the scraper proper, made of a single sheet of steel bent so as to secure the best results in lightness of draft and perfection of filling, and provided with racking runners and an end board of peculiar arrangement, intended to improve the operation and increase the durability of the device. The invention also consists in the improved arrangement of the scraper with respect to its frame, the said scraper being pivoted therein upon double pivots, which are shifted from the front to the rear of the center of gravity, according to whether the load is to be transported or the scraper dumped by revolving.

**IMPROVED NAIL PLATE FEEDER.**

Rollin Van Amburgh, Wetmore, Kan.—The novel points of this feeder rest in the construction and arrangement of the devices attached to the barrel for feeding the nail plate to the knife, and in the means for reversing the barrel before applying its tapered mouth to the knife, which reversing movement is effected through the instrumentality of a band, and a reciprocating block moving on a spirally flanged or auger-shaped shaft.

**IMPROVED CAR COUPLING.**

Samuel Hamer, Salt Lake City, Utah Ter.—This combines a buffer arrangement with the drawhead and coupling. It consists of a spring-acted drawhead, with interior separately movable drawbar, to which a coupling spring hook is pivoted. The drawhead has a top shoulder that comes in contact with an auxiliary spring bolt, and acts as a buffer head.

**IMPROVED HAY ELEVATOR AND CARRIER.**

Joshua Anderson, Short Creek, Ohio.—This invention consists in the construction of the carriage and its arrangement to the track or way upon which it runs, the same being so constructed and arranged that the elevation of the load of hay in the fork trips the carriage and allows it to move upon the ways, and the load is held in its position near the carriage by a retaining device independently of the draft rope, so that it cannot sway to the floor again when the carriage is set free.

**IMPROVED ANVIL.**

James Jenkins, Cortez, Nevada.—This inventor has devised a means of repairing old and worn-out anvils cheaply, and thereby economizing metal, now lost when the face is worn down so as to be unfit for further use. It consists of a steel face and swage block, secured on the top of the anvil by a metal strap, screwed detachably to its sides, and fitted down the sides and under the bottom of the anvil, to which it is fastened. Keys are fitted between the block and the hollow face of the anvil, to support it firmly. The connection of the attaching strap to the sides of the block is such that the block can be reversed to use one side for the anvil face, and the other side for the swage block.

**IMPROVED RESAWING MACHINE.**

Thompson M. Newman, Gallatin, Tenn.—In this device, a rotary saw on a vertical arbor is arranged between two tables which are supported on screws so that they can be shifted up and down to vary the thickness of the stuff. They may also be inclined to the saw for sawing bevels, and have feed rollers geared by countershafts and belts, with the main horizontal driving shaft mounted in the lower part of the frame and turning the saw arbor by bevel gears.

**NEW MISCELLANEOUS INVENTIONS.****IMPROVED MACHINE FOR CURLING FEATHERS.**

Johann Hawlowetz, New York city.—This consists of a revolving curler, in connection with an apron running over a driving roller, an adjustable stretching, and a swinging and spring-acted roller.

**IMPROVED HEEL EVENER FOR BOOTS AND SHOES.**

Abram Dilley, Drakestown, and John L. Larrison, Schooley's Mountain, N. J., said Larrison assignor to said Dilley.—As an improved heel evener for shoes and boots, that may be readily set to keep the heel level for any tread of the foot, the inventor provides two wedge-shaped rubber plates, that are applied by a center pivot to the insole and heel, and adjusted by upward projecting side lugs at their thickest part.

**IMPROVEMENT IN PURIFYING IRON AND MAKING STEEL.**

John L. Randall, Albany, N. Y., assignor to himself and Stephen Munson, same place.—This consists in treating molten cast iron, while in a receiver, with pulverized titanite or equivalent iron ore, potassic ferrocyanide, and potassic nitrate. The process allows of using old as well as new material, utilizing refuse metal the vitality of which has been nearly destroyed, restoring it to a high standard of excellence. By the said combination of materials also a superior and uniform grade of metal, suitable for extra fine castings, is produced, which may serve as a substitute for steel.

**IMPROVED COMPOSITION FOR ARTIFICIAL MARBLE.**

Louis De Planque, New York city, assignor to himself and Francis Strom, same place.—The composition consists of plaster of Paris dissolved in whey, under admixture of starch, glue, and sulphate of zinc. The mass is cast and pressed into molds, in which it remains a few hours until completely hardened. It is taken out of the molds when hard and polished. Any imitation of marble or other stone may thus be produced.

**IMPROVED SHOW CARD FOR BUTTONS AND LIKE ARTICLES.**

Charles A. Righter, New York city.—The buttons are attached to small cards, each card holding one dozen buttons. The cards have pointed ends which slip into slits in the large supporting card.

**NEW HOUSEHOLD INVENTIONS.****IMPROVED MOSQUITO NET FRAME.**

Edward S. Lathrop and Louis Salvaterre, Savannah, Ga.—This mosquito net frame is designed to be applied to a bed or crib, and adapted to be extended with a mosquito netting canopy, which it carries across the bed to protect the occupants. It may also be readily drawn back by the occupants while in bed. It consists mainly of a pair of lazy tongs, one on each side of the bed, and so combined with a supporting standard, attached to the bedstead and the mosquito netting, that the latter may be readily extended across and enclose the upper portion of the bed, or be drawn to one end of the bed and out of the way.

**IMPROVED WINDOW MIRROR.**

Carl A. Demling, New York city, assignor to Anthony Demling, same place.—This is an improved reflecting mirror for the windows of buildings, by which the street in both directions and the door of the house may be observed by a person sitting at the window without the necessity of leaning out. It consists in connecting window mirrors to a sliding sleeve by a ball and socket joint, so as to make them adjustable in any desired direction.

**IMPROVED BOSOM-IRONING BOARD.**

Luther A. Van Kuren, Binghamton, N. Y.—In this device, the bosom is, by means of a swinging bar, readily stretched to the required degree of tension, and tightly held for being ironed until released by the raising of the bar.

**NEW WOODWORKING AND HOUSE AND CARRIAGE BUILDING INVENTIONS.****IMPROVED WAGON END GATE.**

Zaccheus C. Wilson, Nokomis, Ill.—The object here is to furnish end gates for wagon bodies, so constructed, for convenience in dumping grain, that they may be opened and put out of the way without being detached from the said bodies, and in such a way as to leave the open ends wholly unobstructed. When closed they are firmly held in place, so that they cannot be pressed open by the load.

**NEW AGRICULTURAL INVENTIONS.****IMPROVED SEED PLANTER.**

William F. Finney, East Castle Rock, Minn.—This machine, for planting corn, beans, sorghum, broom corn, and other seeds, is so constructed that it may be readily arranged to plant the seeds at any desired depth, that the plows may be easily raised from the ground, and so that the operating mechanism may be readily thrown into and out of gear with the driving wheel.

**IMPROVED COTTON AND CORN PLANTER AND FERTILIZER DISTRIBUTOR.**

William Scott, Fredericksburg, Va.—The invention consists in attaching two or more adjustable hoppers to a main shaft composed of two opposite equal arms, connected and made extensible by a central sleeve provided with a slot and clamp screw. Said main shaft has its bearings in vibrating side bars, pivoting at their front ends on the inner surfaces of the side bars of the main frame of the machine, and their free rear ends controlled by limiting pins fixed to said main frame, which is extensible longitudinally, and provided with the usual shovels, coverers, handles, and marker.

**IMPROVED STRAW CUTTER.**

Amasa Heverly, New Albany, Pa., assignor to himself and Philo Mings, of same place.—In this cutter the knives are made with convex edges, and are attached to a bevel-toothed wheel running against the mouth of the cutter box. Springs are attached to the inside of the cutter box at a suitable distance back of the cutters, and converging toward, and terminating a little in advance of, the cutters, to open and close on the material being cut according to its volume, and to confine it mostly at the middle of the range of the cutters. Through this arrangement it is claimed that the machine works better and easier than when the box is open across the whole breadth, while the stalks are free to be urged away to the outer portion of the cutters.

**IMPROVED COMBINATION AGRICULTURAL TOOL.**

Maynard Reynolds, Manchester Depot, Vt.—This is an improved shank, so constructed as to receive and securely hold a hoe, a weeding hoe, a potato hook, and a rake, in such a way that the said tools may be attached and detached by simply tightening and loosening a screw. A hoe, a narrow or weeding hoe, a potato hook, and a rake are designed to be made and sold with the handle. By this construction, by simply loosening a hand screw, either of the tools can be detached, and another inserted in its place, so that the farmer or gardener need buy but one handle or shank for a set of tools.

**IMPROVED DEVICE FOR PICKING COTTON.**

Richard A. Culliff, Shreveport, La.—The process of picking cotton by hand is slow, tedious, and expensive, and machines for the purpose have failed to come into extensive use, first on account of their cost, and secondly their imperfect operation. The patentee has therefore devised a cheap but efficient means for facilitating hand picking, and the same consists of gloves or other hand coverings, provided with fangs, hooks, or claws, by which the cotton may be rapidly removed from the bolls. To free the cotton from the fangs or claws, a brush is provided, the same being attached to the body of the picker, in a convenient position to allow the gloved hands to be passed across and in contact with it. The cotton, thus removed from the fangs by the brush, rolls off and falls into a bag or basket, which is also strapped to the body of the picker.