DECISIONS OF THE COURTS.

United States Circuit Court.--District of Massachusetts.

PATENT INSTANTANEOUS GLUE.—THE MILLIGAN AND HIGGINS GLUE COMPANY *vs.* GEORGE UPTON.

[In equity.—Decided October 6, 1874.]

The plaintiffs in this case are the assignees of Emerson Goddard's patent, Oct. 4, 1868.

What the patentee claimed in that patent is "instantaneous glue," in which claim he especially includes gelatinous or glutinous substances called glue, produced by the process of disintegrational fine cutting akin to rasping, by which the particles are made thin, scale-like, curling, and are thoroughly fractured, so that they form a loose, incompact mass, readily permeable to and solvent in hot water.

Respondent denies the charge of infringement, and sets up several other defenses upon the merits, as follows: 1. That the original patent was not the proper subject of a surrender, as it was neither inoperative nor invalid, and that it was not lawfully reissued, as the reissued patent is not for the same invention as was the original patent. 2. That the alleged improvement was not, at the date of the assumed invention thereof, the proper subject of invention, nor a novelty proper to be secured by the grant of valid letters patent. 3. That the alleged invention, before the alleged making or discovery thereof, was known to and used by the several persons named in the answer, and was described in the several mechanical and scientific works therein mentioned. 4. That neither the patentee nor the complainant ever used or employed the process or the mechanical instrumentalities, or the mode of operation described in the specification.

Held by Judge Clifford:—

Neither reissued nor extended patents can be impeached in suits upon them for fraud in obtaining them.

The granting of a reissue is conclusive to its validity, unless it appears from a comparison of the papers that the invention is not the same with the one originally patented, or that the Commissioner has exceeded his authority in granting it.

The complainant's original patent claimed glue reduced to minute shavings by a rasping process performed in a machine constructed to give the glue such a form and no other. His reissued patent described the same process and machine, and claimed the product. It was held valid, although it also contained amendments evidently intended to cover glue reduced to fine particles by crushing or other means.

In order to sustain a patent for a manufacture, it is essential that invention or discovery must have been exercised in producing it. It is not enough that it is a new article of commerce.

There is no invention in reducing an article of bulk to minute fragments, when it is not improved by adding some new ingredient, or by subtracting one or more.

Comminuted glue, or glue reduced to fine particles, does not differ in its qualities from flake glue, and a patent for it is void.

Bill dismissed with costs.

[Walter Curtis, Esq., for complainant.
G. L. Roberts, Esq., for defendant.]

NEW BOOKS AND PUBLICATIONS.

OUTLINES OF PROXIMATE ORGANIC ANALYSIS, for the Identification Separation, and Quantitative Determination of Organic Compounds. By Albert B. Prescott, Professor of Organic and Applied Chemistry in the University of Michigan. New York: D. Van Nostrand, 23 Murray and 27 Warren streets.

The author of this work points out, with much truth, that the rapidly extending list of known organic compounds gives great importance to the development of analytical science, which has for many years been sorely taxed to find means of separating the constituent parts of the products of modern discovery, and of identifying them by their reactions and other characteristic indications. The book is a compendious, well arranged treatise, the definitions and instructions being singularly clear and concise.

SHEEP: THEIR HISTORY, MANAGEMENT, DISEASES, AND NATIONAL VALUE; with Remarks on the Transit of Stock. By William Read, Wool Broker. Edinburgh, Scotland: William P. Nimmo.

This little book, written to wake up the British wool grower to the importance of cultivating and extending his important industry, contains much valuable information on sheep and the raising of the useful animals for meat as well as for wool. It may be studied with advantage by our farmers, and read with interest by lovers of natural history.

PHILOSOPHIC REVIEWS. By Lawrence S. Benson, Author of "Benson's Geometry" and other works. Price $1.25. New York city: J. S. Burnton, 149 Grand street.

The first of these essays is entitled "Darwin Answered, or Evolution a Myth," and in it the author launches thunderbolts against "those who deny a Creator," thus making the very common error that the theory of development attempts to get rid of a First Cause. The second essay is a refreshing specimen of the circle squarer's art. He holds that the area of a circle is exactly three times the square of the radius; and the well known fact that a polygon equal to $3R^2$ can be drawn in a circle, and leave a large fraction over, produces no effect upon his faith. After this, we can hardly suppose that the letter on mensuration by weight, published on another page of this issue, will succeed in converting our author to a belief in truth as it is arrived at by inductive reasoning.

THE TRANSMISSION OF SOUND BY THE ATMOSPHERE. By John Tyndall, F.R.S. Also GIGANTIC CUTTLE FISH, by W. Saville Kent, F.Z.S. Price 25 cents. Boston, Mass.: Estes & Laurlat, 143 Washington street.

The first of these essays is well known to our readers, having been already criticised and commented on in our columns. The second paper is an interesting and exhaustive description of the octopus species, whose appearance and characteristics have lately excited the interest and sometimes the horror of our readers.

REPORT OF THE PROPOSED ENLARGEMENT OF THE MONTREAL WATER WORKS, with a History of the Works up to the Present Date. By Louis Le Sage, Superintendent. With Photographic Illustrations, Maps, and Plans. Montreal, P. Q.: J. Starke & Co., St. François Xavier street.

This is an elaborate account of some of the most important arrangements or water supply ever organized on this continent. The writer estimates that, in nine years' time, a daily supply of 16,000,000 gallons will be needed; and he describes a plan, financial as well as practical, by which this quantity can be obtained.

Inventions Patented in England by Americans.

[Compiled from the Commissioners of Patents' Journal.]

From December 1 to December 17, 1874, inclusive.

BALE BAND TIE.—R. Terrell, New Orleans, La.
BORING GUN BARRELS.—J. L. Kerr, Alleghany, Pa.
BUTTON HOLE SEWING MACHINE.—J. McCloskey, New York city.
CARBURETTER.—J. F. Lockwood *et al.*, St. Louis, Mo.
CARRIAGE SPRING.—F. H. Simpson, South Windham, Conn.
CLIPPING HORSES, ETC.—J. H. Small, Buffalo, N. Y.
CONDENSER.—E. O. Brinkerhoff, New York city.
CONDENSING METAL, ETC.—J. B. Tarr, Fairhaven, Mass.
COOK STOVE AND FURNACE.—T. J. Whitehead South Paris, Me.
DISTILLATION.—R. C. Brooks *et al.*, San Francisco, Cal.
DRAWING COMPASS.—W. Smith, Boston, Mass.
DRAWING IMPLEMENT.—W. Smith, Boston, Mass.
FEATHER DUSTER.—A. D. Griswold, New York city.
FIRE EXTINGUISHER.—H. S. Parmelee, New Haven, Conn.
FURNACE GRATE, ETC.—S. L. Wiegand, Philadelphia, Pa.
GOVERNOR.—A. R. Klein, New Jersey.
GOVERNOR.—J. Judson *et al.*, Rochester, N. Y.
IRON AND STEEL.—C. I. Eames, N. Y. city.
KNITTING MACHINERY.—E. Tiffany, Bennington, Vt.
LAMP.—R. Hitchcock *et al.*, Watertown, N. Y.
LAMP WICK.—H. Halvorson, Cambridge, Mass.
MAKING ICE, ETC.—J. M. Beath, San Francisco, Cal.
METAL TUBING, ETC.—G. J. Brooks, Brattleboro', Vt.
PORTABLE FORGE.—W. P. Kellogg, Troy, N.Y.
PROTECTION FOR FIRE, ETC.—J. A. Coleman, Providence, R. I.
RAILWAY COUPLING.—C. L. Horack, New York city.
RAILWAY WHEEL.—R. N. Allen, Hudson, N. Y.
REAPER AND MOWER.—W. A. Wood, Hoosick Falls, N. Y.
REFRIGERATOR.—J. J. Bate, Brooklyn, N. Y.
SACK SEWING MACHINE.—A. J. Gove, San Francisco, Cal.
SACK SEWING MACHINE.—H. P. Garland *et al.*, San Francisco, Cal
SHAFT COUPLING.—S. Stuart, New York city.
SHUTTLE.—J. H. Le Moyne, Boston, Mass.
SKATE.—J. L. Plimpton (of New York city), London, England.
SORTING NAILS.—J. Coyne, Pittsburgh, Pa.
SPRING MOTOR.—N. Jenkins, New Haven, Conn.
STEAM ENGINE.—W. B. Reaney, Philadelphia, Pa.
SURFACING TEXTILE FABRICS.—W. Bell, New York city.
SUSPENDER.—J. W. Wattles, Massachusetts.
TEMPERING STEEL AND IRON.—J. F. Simonds *et al.*, Fitchburg, Mass.
TRANSMITTING ROTARY MOTION, ETC.—F. H. Simpson, South Windham, Ct.
TREATING HYDROCARBONS.—G. H. Smith (of New York city), London, England, *et al.*

Recent American and Foreign Patents.

Improved Combined Cylinder and Sectional Boiler

John F. Taylor, Charleston, S. C.—The object of this invention is to provide a steam boiler in which the advantages of a cylinder boiler are retained, while the objections to it arising from the waste of heat are obviated. It consists in combining a wrought iron cylinder boiler with a cast iron sectional boiler, which latter encompasses the cylinder in the place of the masonry, and utilizes a great deal of the waste heat by heating the feed water, which is first admitted to the sectional boiler, the draft from the furnace being so directed among the portions of the sectional boiler as to secure the greatest possible effective power of the fuel.

Improved Automatic Signal Telegraph.

Joseph W. Kates, Richmond, Va.—The object of this invention is to provide an automatic signal telegraph, to be used in hotels, public departments, large business establishments, etc., which shall transmit to a central supply station the most frequently recurring wants of the establishment, and the operation of which shall be so simplified as to be adapted to the ordinary intelligence of persons unskilled in telegraphy. It consists in a series of non-conducting perforated tapes, each perforated to represent its peculiar want. Said tapes are wound around a grooved drum which is on the same shaft with the mainspring of a clock gearing, the said clock gearing, drum, and tapes being so relatively arranged that a withdrawal of the tapes winds up the spring of the clock gearing; and the reaction or retrograde motion of said spring, when the tapes are released, winds up the said tapes upon the drum, and sends the line current through the perforation in the tapes by means of conducting rollers, between which the said tapes pass.

Improved Washing Machine.

John S. Shrawder, Fairview, Pa.—This invention consists in a reciprocating washbox having front and rear ribs, and reversely notched side rubbers rigidly attached thereto. It enables the ordinary washing to be done with unusual facility, while its work is very thorough and effective.

Improved Cotton Scraper.

George W. Beard, Grenada, Miss.—This invention relates to the shape of and mode of attaching scrapers to a plow, and consists in making the cutting edge come to a point at the middle of front, and form an angle with the sloping upper and lower edges; also in the arrangement of the scraper with respect to the plow, so that what the former shaves from the sides of the row will be transferred to the share and moldboard, turned with the furrow slice, and discharged into the middle space between the rows.

Improved Anti-Friction Metal.

Jeremiah K. Guile, Rochester, N. Y., assignor to himself and Joseph B. Champion, New York city.—This is an improved anti-friction metal for journal boxes and other bearings which, it is claimed, will not heat from friction, and will take a high polish. The invention is prepared of zinc, tin, antimony, glass, slaked lime, and borax. The entire journal box is made from the alloy. The inventor submits reports of United States naval engineers detailing extended tests, which show that the use of the metal tends largely to reduce friction as well as to save oil.

Improved Ore Separator.

Benjamin F. Day, of Tamaqua, Pa.—This invention relates to machines for separating coal from slate, and ore from other materials, when there is a difference in the specific gravity; and consists in exposing the coal or ores to the action of an ascending current of water moving with sufficient velocity to carry forward the coal or lighter material while the slate or ores of greater specific gravity pass down through the column of water. In this manner the desired separation is automatically and completely effected.

Side Bar and End Spring Connection for Vehicles.

Ephraim Soper, Brooklyn, E. D., N. Y.—This is a flexible coupling, of leather or other substance, arranged in the form of a strap, attached to the bar and looped around the bolt of a clip attached to a spring for coupling the side bar to the spring. The torsion caused by the lengthening or shortening of the spring will thus be expended on the flexible coupling, and the bars will be free to work without being exposed to the torsion to which they are subject when clipped directly to the springs, as in the common way.

Improved Step Ladder.

Orange M. Sweet, Forestville, N. Y.—In this ladder the standard is adjusted to the main body of the ladder by a hinged brace, which slides by a pivoted sleeve with fastening clamp screw along a guide rod connecting two middle steps. This renders the ladder light and easily adjusted, while sufficiently strong.

Improved Feed Bag for Horses.

Thomas Medley, New York city.—This is a horse's feed or nose bag made of coarse horsehair, twisted into strands and woven into a reticulated cloth. By the construction, the meshes of the cloth are of such a size as to allow air and the dust from the grain to pass through readily, while the grain itself will be held securely.

Improved Straw Cutter.

William Boyce, Lowell, Mich.—The hood is hinged to a lid, which is fastened to the long pivoted arms. The hood folds forward, and the lid folds to the rear with the hood, leaving the entire top of the cutter exposed, so that the front parts may be conveniently reached for repairing, and the feed inspected at any period of the cutting process.

Improved Tether.

Morgan & McAfee, Talbotton, Ga.—This invention consists of a long elastic pole with a hitching line attached to the small end, the pole being attached by a crotch at the butt. A suspending wire is attached thereto, and another is secured a short distance above to a strong stake driven in the ground, so that it projects upward and outward from the stake, and at the same time revolves around the stake in such manner as to form an efficient mode of fastening stock to a center, around which they may graze without twisting the rope or becoming entangled in it.

Improved Chuck.

George R. Stetson, New Bedford, Mass.—In this improved chuck, the radial guide ways for the jaws are extended longitudinally through the solid body portion parallel with the axis, and drivers are arranged therein for working the jaws. Said drivers are connected with the jaws by a flange on the side of one in a radial groove in the side of the other, so as to allow of radial motion to the jaws at the same time that they are moved longitudinally. They are also geared by screw threads on the outer edge and threads upon the inside of a ring turning upon the body of the chuck, to be moved forward and backward for driving the jaws.

Improved Forming Block for Fur Goods.

Jefta Popovits, New York city.—The object of this invention is to stretch the waist and back parts of fur garments, so as to impart an enlarged and rounded shape to the same without cutting and sewing up the parts. It is a forming block, of pyramidal shape, resting on its largest side, and having trapezoidal top and bottom sides, and triangular connecting sides of steeper inclination. The fur is stretched in wet state over the body of the block, and retained thereon by suitable fastening straps until completely dried.

Improved Earth Auger.

John Pickle, Kosciusko, Miss.—This invention relates to an earth borer, that cuts and lifts the earth readily from the bore hole; and it consists of a hollow cylindrical body, provided at its inner circumference with projecting and adjustable side-cutting blades, together with intermediate blades twisted toward the center, to form a diametrical connection with the side cutters for cutting and lifting.

Improved Metallic Shutter.

Fisher F. Fletcher, Sioux City, Iowa.—This invention contemplates the manufacture of a single sheet shutter, paneled and braced so as to possess the necessary strength with only a weight of about twenty-five pounds. A continuous sheet is reinforced on the margin or edges by riveted strips, and braced in the middle by a raised panel.

Journal Bearing for Cylinders of Chromatic Printing Presses.

Elié Gaiffe, Paris, France.—This invention consists in the adjustment of the engraved cylinders with reference to the presser roller, for the purpose of securing accurate registration of the different colors. The journal of the engraved cylinder is adjusted horizontally to the presser roller through a set screw, and is adjusted vertically by like means, the pivoted bearing of the journal preventing the change in its vertical adjustment from necessitating any change in its lateral adjustment, as the pressure of the set screw is always transmitted direct to the journal, whether the latter be in a right line or otherwise. A cushion renders the pressure of the cylinder always elastic and uniform.

Improved Envelope.

Thomas H. Bomar, Spartanburgh, S. C.—This envelope is made with two folding sides, one of which is pasted down to narrow flaps after they are turned inward on a central portion, thus forming a pocket for the letter, leaving one of the end flaps ready to be turned over on one side, upon which is written or printed the name and address of the sender of the letter. When the envelope is returned to the writer, the addressed portion with its flap is torn off, which still leaves a perfect envelope, having the name and address of the writer plainly written or printed on the outside.

Improved Fare Box.

Patrick J. Stokes, New York city.—The opening and closing mechanism attached to the inner side of the fare box cover consists of pieces of sheet metal which are pivoted to the cover, so that they may be turned in order to make holes in them correspond in position with the holes in the cover. A spring fastened to the cover has a hook at its end, which prevents the movement of the pieces until a wedge which is pivoted to the cover is pushed down to force the spring outward. This is done when the cover is closed down and placed in the case, so that catches will engage with and turn the pieces and open the apertures. When the box is withdrawn, the pieces are turned in the opposite direction to close the apertures.

Improved Sliding Stem Valve.

Jabez Stone, Waterford, N. Y., assignor to George W. Eddy, same place.—Upon one side of the upper part of the valve stem are formed rack teeth, into which mesh the teeth of a pinion. The shaft of the pinion works in bearings in a chamber which is formed upon the upper end of an arm, upon the lower end of which is formed a collar, which passes around a neck formed upon the upper part of a cap, just below the stuffing box. This construction allows the stem chamber and collar to be turned freely in any direction to bring the handle attached to the shaft of the pinion into any desired position to avoid obstructions, or to enable it to be conveniently reached by the engineer.

Improved Necktie Plate.

Martin Dreunan, Brooklyn, N. Y.—This is a little frame having three vertical parallel looping holes, and one horizontal opening at right angles to and below the others, for forming various bows, knots, and ties of scarfs for neck wear. There are slots adapted for attaching the frame to a belt, to be worn as a buckle, and it is provided with a pin for fastening it to the dress.

Improved Lamp Chimney.

Thomas W. Parker, Griggsville, Ill.—Each of the longitudinal halves of a glass lamp chimney is provided with corresponding notches in one of the adjacent edges. A spring clamp having a lug is adapted to fit into said slots. Expansion of the chimney from heat is thus permitted, and yet its parts are held firmly together, and lengthwise movement of one on the other is prevented.

Improved Mashing Process for Breweries.

John C. G. Hüpfel, New York city.—This is an improved mashing process for breweries, consisting in the admixture to the common bruised malt of a suitable quantity of finely ground and bolted malt, to be mashed therewith for the purpose of imparting a stronger malt taste in the beer produced, without interfering with the drawing-off of the worts from the mash tub.

Improved Manufacture of Striping Brushes.

Thomas J. Elder, Lanark, Ill.—This invention consists in making the handles of the brush of two pieces of wood, which clamp the hair, and are held together by means of glue. Wide pieces of thin wood are used with the grain running in the same direction with the strands of hair, so that, when desired, the wide pieces may be broken into a number of smaller sections, forming brushes of less width adapted to the different styles of work.

Improved Ore Roasting Furnace.

Ernst Heiligendorfer, Belmont, Nev.—The ground ore is fed through a hopper into a heater, through which it is gradually transferred by a screw, while a furnace is heating it. Having arrived on a sieve, the ore is quickly spread over the surface thereof, so as to cause its particles to be subdivided in passing through the reticulations. The particles thus pass down from the sieve in numerous little streams, so that the hot gases act readily on all sides of each particle.

Improved Cutting Apparatus for Harvesters.

Charles K. Myers, Pekin, Ill.—An arm having a crosshead and bent end is secured to the under side of the sickle bar. It also passes through and works in a long notch in the upper side of the middle part of the finger bar. In the turned-down rear part of this arm is formed a square hole to receive the head of another bar, by which the sickle bar is driven. The sides of the head of the driving bar are rounded off, so that the said head may fit snugly in the square mortise of the arm, at whatever angle the said driving rod may be.

Improved Horse Hay Rake.

Amos W. Coates, Alliance, O.—This invention consists in pivoting a foot lever over a front-closed and rear-open box, so as to enable the usual toggles to be easily operated by the driver without stooping or changing his position. This construction enables the operator to run the teeth of the rake high or low, according to the evenness or unevenness of the ground in different parts of the same field.