IMPORTANT PATENT DECISION.

UNITED STATES CIRCUIT COURT, SOUTHERN DISTRICT OF NEW YORK. IN EQUITY. DECISION BY JUDGE BLATCHFORD.

The Rumford Chemical Works vs. John E. Lauer. Opinion of the Court. July 13, 1869.

The Rumford Chemical Works vs. John E. Lauer. Opinion of the Court. July 13, 1865. In this case the original patent was granted to Prof. Eben N. Horsford, AJE: 12, 1865. and was reissued to the plaintiffs, who are assignees. May 7, 1867, and reissued to theor, a second time. Junce 1, 1667. The infringement al-lered in the bill is the making and selling by the defendant, of pulverulent acid, in infringement of said reissued patent of 1868. The specification of the plantiffs' patent states the invention to be "a new polyer" eff acid for use in the preparation of soda powders, fairnaecous froud, and for other purposes." If then describes the acid and the mode of its programitor. It says: "Carefully washed and properly burned bones, after described bones, (sometimes called one ash), four hundred pounds of oil of vitriol, and one thousand pounds water. These ingredients are stirred, from time to time, for about three days, when, ordinarily, the action will be com-pleted, and the resultant products will be phosphoric acid, superphosplates and subtate of line, or gypsum, with a small proportion of saits of mag-resia and soda in a paste-like mass." Various methods are then described for making this mass pulverulent; (4.) Mixing it, while molst, with any farinaceons substance, drying it slowly in the aun or with artificial heat not above 150° F. and pulverizing it, (50°). Drying and pulverizing it without admixitures. All of thesennodes are stated to have given desirable results, but a preferable mode is then described, which consists in leaching the mass, con-centrating the mass to 25° Baume, thereby obtaining a solution consisting of phosphoric acid an acid phosphate of line, with slight traces of other saits, substantially freed from gypsum or sulphate of line, with slight traces of other saits, substantially freed from gypsum or sulphate of line, heating the solution the added bone as, becomes pasty, cooling the mass, containing in solution the added bone as the decones pasty, cooling the mass, adding seventy-si

The defendant is the carbon test of a substitute for ferment or leaven, in the preparation of farinaceous food.¹ The DEFENSE. The defendant as anterfact of the original and first in-ventor of anything which has been made and sold by the defendant, and that the defendant has not infringed the patent. • • The article relied on by the defendant as anteddating Horsford's acid, is what is known as the three fourths phosphate of Berzelius, described in the Hand Book of Chem-istry by Leopold Gmelin, volume 3, page 195, published in 1846. It is claimed by the defendant, that this three-fourths phosphate is an acid phosphate of lime, possessing all the properties and qualities specified in plaintiff's patent as being possessing the prostrices and qualities specified in plaintiff's patent is the phosphate of the order of a dualities specified in the Hand Book of Chem-by the defendant, that this three-fourths phosphate is an acid phosphate of self-raising farinaceous bread; that it is a dry, non-hygroscopic, fine, white, homogeneous powder, unobjectionable on account of odor, taste or compo-sition; that the phosphoric acid of such powder is the acitive agent, when the powder is inized with bicarbonate of soda and moistened, in uniting with the soda of the carbonate, to evolve carbonic acid gas, forms phosphate is so calle decause it has a chenical composition of or atoms of oxide of lime and three atoms of phosphoric acid. The entre passage in Gmelin describing this phosphate is as clonel, acid is saturated with the salt (a), the solu-tion mixed with alcohol, and the white precipitate formed washed with alco-hol and arised. White powder, having an acid taste and redeening litmus, with water it separates into the insoluble salt of and an acid salt, which re-mains in solution (with one atom of acid?) (Berzelius Ann. Chem. Phys., 2, 67.) If thesalta checking the same manner by water, but contains metaohosphoric acid as the same and sold salt, which re-mains in solution (with one atom of acid?) (Berzelius, Ann. Chem

sticks to the teelth; alter hyplic, is becomes stitues it and a second point fraible. This substance has the same compession and the add a sort in ary phosphoric acid. EVIDENCE FOR THE DEFENDANT. The defendant claims to have shown that one Place, who is not a chemist, prepared, from directions given to nim, an acid posphate, in the form of a powder, which was accessfully, used in making bread, in connection with the hearboard of the acid that the mode of preparation corresponded with the hearboard of educations and that the mode of preparation corresponded with the prepared, in contained that the mode of preparation corresponded with the hearboard of educations and that the provide that a provide that a provide the acid provide the statistic of the acid provide of the statistic of the provide that a provide that a provide the acid provide the statistic of the statistic of

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erence to certain constituents and qualities of the pulverulent phosphoric acid that is made by this process, but the broad claim made to the acid de scribed, is not tenable.

scriped, is not tenable. The bill must be dismissed with costs. W. WHITING and C. A. SEWARD, for the plaintiffs. E. W. STOUGHTON and C. M. KELLER, for the defendant.

Answers to Correspondents.

CORRESPONDENTS who expect to receive answers to their letters must, in all cases, sign their names. We have a right to know those who seek in-formation from us; beside, as sometimes happens, we may prefer to ad-dress correspondents by mail.

SPECIAL NOTE. This column is designed for the general interest and in-struction of our readers, not for gratuitous replies to questions of a purely business or personal nature. We will publish such inquiries, havever-when paid for as advertisemets at \$100 a line, under the head of "Busi-ness and Personal."

IF All reference to back numbers should be by volume and page.

C. P. P., of Kansas.-The chemical symbol HO, signifies one equivalent of hydrogen combined with one equivalent of oxygen. The equivalent of hydrogen being 1 and that of oxygen 8, the equivalent of HO, or water, is 9. The equivalent of a substance in the old nomenclature is based upon the weights in which, or in some multiple of which, it gen-erally combines with other bodies. The new nomenclature takes into account the volumes of substances when in a gaseous state, as it has been found that generally the molecules of compound bodies when reduced to the gaseous state occupy equal volumes, and that, also, a simple relation exists between the volumes of any two gases which combine together. It also makes a distinction between the terms equivalent and atomic weight and from the above considerations as well as others equally forcible, makes the atomic weights of many substances just double the numbers assigned in the old nomenclature as their equivalents. Hence, according to the new nomenclature, water is represented by H O. In our paper

when we find occasion to use chemical formulæ we still use the old nomenclature, as many of our readers, who have all their lives been accus tomed to it, have not probably found time to post themselves upon the new, which is now generally adopted in scientific schools, and in very recent treatises involving the use of chemical symbols.

A. M., of La.—We believe that no cheap ice machine suitable for use in families has yet been introduced. A cake of ice weighing 30 lbs may be kept easily 48 hours in a good refrigerator before it melts away, if the box is not too frequently opened. You can filter and cool water by passing it through an underground filter, but with the low head you have got it will not enter the house with much force. It will, however, probably answer your demands.

R. H., of N. Y.-You can cleanse barrels from must, by burn- ing off" and " winding on" motions. ing a small quantity of sulphur in each, after which they should be well rinsed with cold water.

M. L., of Vt.-The term isomeric is applied to compound chemical substances, which, having the same elements combined in the same proportions, still exhibit different properties.

A. A. S., of Wis.-The greater the hight to which a given quantity of water is raised in a given time, the greater the power required to raise it.

J. B., of Mass.-You will not in our opinion be able to punch wires in the way you described. The temper is already out of annealed wire and we don't see why you should seek to do what is already done.

W. F., of Pa.—Good pine or cedar is the best timber for mak

To Manufacturers or Patentees.-Wanted-By a responsible hardware house, long established in the city of New York, the agency or the right to manufacture, some good patented article in their line of trade. Address P. D. & Co., Postoffice Box 3,517.

Mill-stone dressing diamond machine, simple, effective, durable Also, Glazier's diamonds. John Dickinson, 64 Nassau st., New York.

Leschot's Patent Diamond-pointed Steam Drills save, on the average, fifty per cent of the cost of rock drilling. Manufactured only by Severance & Holt, 16 Wallst., New York.

Tempered steel spiral springs made to order. John Chatillon, 91 and 93 Cliff st., New York.

The Tanite Emery Wheel-see advertisement on inside page.

For solid wrought-iron beams, etc., see advertisement. Address Union Iron Mills, Pittsburgh, Pa., for lithograph, etc.

Machinists, boiler makers, tinners, and workers of sheet metals read advertisement of Parker's Power Presses

Diamond carbon, formed into wedge or other shapes for pointing and edging tools or cutters for drilling and working stone, etc. Send stampforcircular. John Dickinson, 64 Nassaust., New York.

The paper that meets the eye of manufacturers throughout the United States-The Boston Bulletin. \$400 a year. Adv'g 17c, a line.

Winans' boiler powder, 11 Wall st., N. Y., removes Incrustations without injury or foaming 12 years in use. Beware of imitations.

Becent American and Loreign Batents.

Under this heading we shall publish weekly notes of some of the more prom. inent home and foreign patents.

BEEHIVE.-George A. Robinson, Mount Pulaski, Ill,-This invention rg. lates to a new and useful improvement in beehives.

BLIND FASTENING,-Leonard D. Howard, St. Johnsbuby, Vt.-This inven. tion relates to a new and improved fastening for blinds and shutters of windows.

SELF-ACTING MULE .- C. J. Greene, Clneyville, R. I.-This invention rclates to improvements in self-acting mules, such as are known as Mason's mules, the object of which is to provide more simple and reliable "back-

HAIR-CURLING APPARATUS .- Mrs. Marcia Adkins, Oswego, N. Y .- This invention relates to improvements in hair-curling implements. It consists in the application to a hollow heating and curling mandrel of a combing, pressing, and spirally-laying apparatus, whereby the operation may be rapidly and accurately accomplished.

GRINDING EDGE TOOLS.-Lorenzo Zimmerman, Waukeshma, Mich.-This invention relates to a new and useful apparatus for holding edge tools in grinding them on a grindstone, and consists in an adjustable bar connected with the frame of the grindstone at its back end, with an adjustable lever attached thereto, with a jaw on the end of the lever for holding the tool to the bar and to the stone.

GAGE FOR SEWING MACHINES.-Mrs. Anna P. Rogers, Quincy, Ill.-This invention consists of an adjustable gage plate having a recess in its front edge, in which a presser pad having inclined serrated grooves on its lowe face, is arranged and connected to the said gage plate by an adjustable spring which governs the pressure of the pad upon the cloth

THE PLAINTIFFS' EVIDENCE. In reply to the testimony introduced on the part of defendant as to the identity of the powder described by Gmelin, with the powder claimed in the first claim of the plaintiffs' patent, as above defined. Professor Horsford, him-self, and Professor R. Ogden Doremus, testify, that flave were unable to make, with certainty, from the description in Gmelin, a powder capable practically of being relied on to envolve carbonic acid gas from bicarbonate of soda. Professor Doremus states, that the paragraph in Gmelin does not contain such a description as will enable him, as a practical chemist, to produce pul-verulent acid phosphate suitable for use in making bread; that he saturated an aqueous solution of phosphoric acid with phosphate of line, nixed the solution with alcohol, producing a white precipitate, wasied that an acid taste and readened litmus, but, after a short time, became iner and would not, when mixed with bicarbonate of soda and water, envolve car-bonic acid gas, although, when first prepared, it would, when combined with the locarbonate of soda, set free carbonic acid; and that he made but one experiment to produce a powder by following the description in Brein.

one experiment to produce a power by following the description in f Gmelin. Professor Horsford testifies, that he began his attempt to make a practical pulverulent phosphoric acid, suitable for use in the preparation of break, with the study of what Berzelius describes; that he devoted a great lead of time to the subject, and found that, when produced in the manner described by Berzelius, the article was sometimes sticky, and uniformly loss strength from day to day, however prepared, until it was finally without any capacity to decompose blearbonate of soda, and was sometimes, when first prepared, inert; and that he experimented for many months, between the year 1853 and the year 1856, to produce the three-fourths phosphate described by Berzelius, sometimes producing three-fourths phosphate described by Berzelius, sometimes producing three-fourths phosphate described and by berzelius, the produced scheris strengt hand become, in time, substantially inert. He produced some specimens which he stated were made, during the taking of testimony in this case, in accordance with the method given by Berzelius, one of which was inert, and the other three nearly so, one of the latter being sticky. sticky.

JUDGE BLATCHFORD'S CONCLUSIONS.

In this condition of the chemical testimony, that on the part of the defendant far outweighs that on the part of the plaintiffs. The former is positive \mid

ing vats, etc., for holding boiling water. Soluble glass will not be of service to you for such purposes.

S. H., of Ind.-As soon as we can get a locomotive constructed that will run as fast as the initial velocity of a cannon ball we will try the experiment you suggest, and shall expect to find that the ball will drop perpendicularly from the mouth of the cannon to the ground.

Business and Lersonal.

The Charge for Insertion under this head is One Dollar a Line. If the Notices exceed Four Lines. One Dollar and a Half per line will be charged

Send for Agents' Circular-Hinkley Knitting Machine Co., 176 Broadway. Wanted-A partnership in a machinery furnishing business, or a position as mechanical engineer. Address W. C. Zane, Jr., Phil'a, Pa. For Sale-A 20-H. P. link-motion propeller engine, suitable for stationary, good order. Hosford & Garsides,211 Greene st., Jersey City.

Hoop Iron, 7-8 & inch, cut to any length ordered, 5c. Punched,

marble, etc., etc. Pugsley & Chapman, 30 Platt st., New York.

GUIDE ATTACHMENT FOR BORING INSTRUMENTS .- Arthur Amory, New York city .- This invention relates to improvements in apparatus for indicating the position of boring instruments, to assist the operator to guide them properly for boring horizontally, vertically, or angularly, as required. The invention consists in supporting a pair of spirit levels upon the of the boring instrumentby a clamp which may be readily attached or detached, the levels being so adjusted as to indicate the position of the boring stock horizontally, vertically, or obliquely.

PLASTERING MACHINE .- Thomas McKinley, New York city .- This invention relates to a new and improved method of plastering, whereby the tedious and expensive operation of covering walls and ceilings of buildings with mortar is greatly facilitated, and it consists in moving over the floor of the room where the plastering is to be done, a machine resting on wheels, consisting of a box containing the mortar, with a piston to fit the box, which piston is forced upward by means of gearing actuated by the supporting wheels, the mortar being forced from the box by the piston in a thin sheet and pressed upon the lathing or wall as by a trowel.

REFRIGERATOR -S. R. Scoggins, Baltimore, Md. - The object of this in vention is to provide for public use a simple, cheap, and convenient reas many holes as ordered, 6c. per lb. Tubs, barrels, bunching shingles, jrigerator, which shall be properly ventilated, and shall be capable of keeping food, etc., nearly at the freezing point.