



[Reported Officially for the Scientific American.]

LIST OF PATENT CLAIMS

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FOR THE WEEK ENDING DECEMBER 18, 1852.

HYDRANT VALVE—By James Cochran, of New York City: I claim a combination with the feeding pipe and main cock or two way cocks, flat or conical valve and leakage wasteway, a piston and chamber, or a partly flexible chamber emptying into and receiving from the issuing pipe, water, between the interval of opening and closing the main and leakage wasteway.

I claim, also, the shutting force, by hydrostatic pressure and gravity of the ordinary way to water; also the general arrangement of the moving parts by their gravity, to favor the shutting force, as set forth.

BIT SOCKS OF BRACES—By John Comstock, of New London, Ct.: I claim the arrangement of the ring with its pin or screw, in combination with the eccentric shaped back catch, and the helical spring, the whole combined and arranged as set forth.

MODES OF FIXING THE COLORS OF COTTON UMBRELLA—By Norman Cook, of New York City: I do not claim the composition of the preparation applied, neither do I claim the application of such preparation for rendering cloth water proof.

I claim the application of a dilute solution of india rubber paste or cement, as described, to cotton or gingham umbrella coverings, for the purpose of enveloping the fiber of the cloth, and setting the color of the same, without adding to the weight of the umbrella, as set forth.

CAR WHEELS—By Carmi Hart, of Bridgeport, Conn.: I claim the arrangement of the plates of the wheel in the arch at the hub, so that its opposite sides curve in similar curves, adapting themselves to each other, and are also ogees, and whose continuation from the apex or point of union is also an ogee to the rim in combination with the spokes or radii, which are ogees on the surface of the inner plate, and also ogees sidewise, and forms a continuous part of the inside plate itself.

INKSTAND COVERS—By Jos. Nock, of Philadelphia, Pa.: I claim the application of the stamped round part and the solid part (of the moving lid or cover), fitted together as a hinge, which forms a rounded smooth turned face, and the manner in which the pin is connected with both parts, as described, using for that purpose the aforesaid two pieces to form a regular curvature or round turned hinge, made of any materials which will produce the intended effect.

SPRING CLAMPS FOR CLOTHES LINES—By P. S. Hotchkiss & G. W. Blakelee, of Northfield, Conn.: We claim the connecting together of the two levers, as described, by one piece of metal, in such form and manner as to constitute both spring and hinge, as set forth.

TURKEYS—By Melvin Jinks, of Wayland, N. Y.: I claim the turkey, as described, in the adjustable claw, constructed and arranged as described, in combination with another claw, and the rolling fulcrum having a limited motion.

[In Vol. 7, page 396, may be found a description of this invention.]

BEDSTEAD FASTENINGS—By W. E. Merrill & Freeman Tupper, of Nashua, N. H.: We claim securing the posts and nails together, by means of the corner irons attached to the ends of the rails and the clamp or dog attached to the posts of the said corner irons and clamps or dogs, being constructed and arranged as described.

[A description of this invention may be found on page 298, Vol. 8 Sci. Am.]

HARVESTERS AND BINDERS—By J. E. Nesen, of Buffalo, N. Y.: Patented in England Aug. 27, 1851: I do not claim the slotted fingers, nor the teeth, nor do I claim an endless belt, irrespective of the peculiar motion communicated to it.

I claim, first, giving the endless apron an intermittent motion, for the purpose of carrying the grain to the binding hooks, at intervals and in proper quantity said motion being communicated to the apron, by means of a belt shifter worked automatically, from some moving portion of the machine, as described.

Second, I claim gathering the grain in bundles or sheaves, by means of the binding hooks, or their equivalents, said binding hook being arranged and operated as shown—motion being communicated to them by means of the reciprocating bars, as described.

Third, I claim the binding hooks in combination with the endless intermittently moving apron, the hooks and apron being constructed, arranged, and operated as set forth.

[This invention possesses novelty and utility. The foreign as well as American patents were solicited through this office.]

SECTIONAL BEDSTEADS—By Chas. Page, of North Danvers, Mass.: I do not claim a sectional bedstead, the portions of which revolve upon hinges, for the purpose of more convenient transportation, or of raising the head as may be required; neither do I claim securing the mattress permanently to the bedstead.

But I claim, in a sectional folding bedstead, the combination of the adjustable sections with the revolving head and foot boards, as described, by which means the bedstead may, at any time be converted into an invalid bedstead, and extended in such manner that the body and head of the part may be raised and lowered, independent of each other, his feet being furnished with an elastic foot board, as set forth.

PEG RASPS—By Jos. Sawyer & Lyman Clark, of South Royalton, Mass.: We do not claim limbing the rasp of a tool for cleaning out pegs from the inside of shoes and boots upon a pivot, and allowing it to adjust itself to the position required, as this has been done before, and is furthermore liable to several objections, the removal of which is the object of our present invention.

But we claim the combination of the pivoted rasp and thin piece, or their equivalents, with the pivoted rasp constructed and operated as described.

MACHINES FOR CUTTING SHEET METAL—By Jno. Wilmington, of South Bend, Ind.: I do not claim the rotary shears; but I claim the vise in combination with the frame upon which it moves, and upon which the sheet rests, during the operation of cutting, as set forth.

PUMP VALVES—By J. R. Bassett, (assignor to James B. Williams), of Cincinnati, Ohio: I claim, first, the construction, as described, of the poppet check valve, serving also as the piston of a pneumatic spring, and provided, at its lower end, with a small starting valve, substantially in the manner and for the objects explained. Second, the segmental cylindrical side valve of the discharge openings having prongs as described, connecting it with the check valves upon the supply openings, so that the motion of the supply valves shall be communicated to the discharge valve, as explained.

MACHINES FOR MOULDING BRICK—By John Butter (assignor to James Bally and Jno. Butter), of Buffalo, N. Y.: I claim two hinged followers, so constructed and operated as to press the clay uniformly into the moulds, that is, each end alike, whether operated by gears or levers.

A Lead Wire the thirteenth of an inch, sustains but twenty-eight pounds. A Tin Wire, the thirteenth of an inch, sustains but thirty-four lbs.

New India Rubber Case.

We here present the decision of Judge Duer of the Superior Court, in this city, on the above case, which was finished on the 9th inst.. It had been on trial several days, and eminent counsel were employed on both sides. The question was between Horace H. Day and William Judson. All those interested in patents should give this case particular attention. Wm. Judson filed his bill to obtain an injunction against Day from prosecuting certain suits in the Circuit Court of the United States, (in which Day is seeking to recover damages for infringement of a patent granted to Edwin Chaffee, and by him conveyed to Day,) on the ground that Judson owned the patent, by assignment, and the conveyance to Day was invalid.

JUDGE DUER'S DECISION.—I shall not trouble the counsel of the respondent to reply. I have reflected on this case from the opening of the argument, and am now prepared to state the conclusion to which I have arrived.

I think it quite unnecessary to inquire whether this Court can rightfully stay proceedings in the Court of a sister State by an injunction, but with regard to suits pending in the United States Courts the case is different. With respect to them the general rule is understood to be, that neither will the Courts of the United States attempt by injunction to restrain a party from proceeding in a suit in the State Court; nor, on the other hand, will the State Court attempt to restrain by an injunction, proceedings in a Court of the United States. Whether that rule is absolute and universal—whether there are or are not any exceptions to it, it is not necessary to decide in this state of the case.—That will be a question which, if your suit is continued to be prosecuted, will arise when a final decree shall be asked for. Admitting, however, that there may be exceptions to the rule, as it respects a court of the United States, I hold, that in order to justify a Court in treating any case that is brought before them as an exception to that rule, the following facts must appear:—First, that the complaints must be founded upon the equity that the Court of the United States, in which the suits are sought to be enjoined are pending, is not competent to administer the cause—in other words, that the equity which is sought is one which can only be had in the new suit which is instituted; and second, that the whole controversy between the parties may be determined in the new suit which is instituted—or in other words, that the parties who are sought to be restrained from the prosecution of their suits in another Court, may have exactly the same relief if the controversy is determined in their favor in the new suit which is instituted, as if they never entertained any of the suits which have been commenced.

Now applying these rules to the present case, the first condition seems to be fulfilled. The object of this suit is to obtain a final determination of the question whether the prior grant made to Mr. Judson, the plaintiff, on this grant under which Mr. Day, the defendant, claims is valid. That question could not be finally determined in any suits that are brought by Mr. Day against the licensees of the present plaintiff. It is true that each of these licensees may set up as a defence the prior grant made to the present plaintiff, and the question as to its validity might arise in this suit; but the determination made between them would not conclude any other licensee, and therefore surely would not conclude Mr. Judson. I therefore think that the main question depending between the parties—namely, which of them has a preferable title as assignee of the original patent—is one which will probably be determined in a suit between Judson and the present defendant. Therefore I would not scruple, perhaps, even to issue an injunction, provided the other conditions were fulfilled—namely, that this whole controversy should be finally determined. I am now considering the case as if the application was made to me upon the complaint itself, without any evidence on the other part. I have no right to suppose upon the complaint itself that the plaintiff considers it as a fact conceded that these complainants are absolute owners as assignees of this grant; because, if so, then the question could not arise whether the defendant would or could not be entitled to

damages in the suits which he has instituted. I am bound to suppose in determining the question whether the Court will exercise its discretion in issuing an injunction, that the allegations in the complaint may perhaps be refuted, and that in the conclusion of the controversy, the defendant may prevail. Then I hold it to be a necessary condition in all cases where an injunction is to be issued, where a bill of peace is filed, whether in a State Court, or in a Court of the United States, that the party who is thus enjoined shall have, in the new suit thus instituted, the same relief which, if he prevails, he would be entitled in the suits which he himself has brought. Now, if the other parties against whom these suits are instituted, were all of them parties to the present proceeding, and by a final decree of this Court, this defendant could obtain against them here, precisely the same relief which is sought in the suits that have been instituted, that objection would be removed. But they are not parties to this suit, and all that can be determined in this suit, even if it should be decided in favor of the defendant, is that his grant is preferable, and that the prior assignment made to Mr. Judson, the plaintiff, is void. His right to recover damages will remain still undecided, and he will be compelled to prosecute his suit against the defendants, who, in the meantime, may have become irresponsible. Upon the ground, therefore, that this controversy cannot be determined finally in this suit, and that the defendant cannot obtain the relief here which he is seeking to obtain in the suits which he has instituted, I feel myself bound to deny the motion for an injunction.

In answer to an inquiry of Mr. Stoughton, Judge D. remarked that he never knew of a case where an injunction had issued on the application of a party who was not a party to the suits to be enjoined.

An appeal was taken to the General Term. For Judson, Charles O'Conner and James T. Brady; for Day, N. Richardson, of Boston, and E. W. Stoughton, of New York.

[Our readers will perceive the importance of this case, by the eminent counsel employed. The patent in dispute is that of E. Chaffee, an extension of which was granted by Ex-Commissioner Ewbank.

The assignees of the first term of this patent were Goodyear, Judson, and others, (we do not know all their names) but the extended term of a patent does not become the property of the first assignees; it is wholly the inventor's property; former assignees have no legal right to an extended term. H. H. Day, it seems, has become the assignee of the extended term, but there is a dispute about the legality of his bargain. H. H. Day having become the new assignee of the extended term of Chaffee's patent has entered his suits against a number of old assignees, who have been carrying on the manufacture of prepared india rubber goods as formerly. His (Day's) suits are for the infringement of the patent. The above decision relates to a mercantile transaction; but connected with patents, it embraces new points of legal dispute of no minor importance.

Trial About Selling a Patent.

In this city on Friday the 16th a suit was brought before Judge Ingraham by Samuel G. Walker against Abraham Cox to recover damages (amount laid at \$1,000) for alleged deceit and false representations—plaintiff having been induced, it is said, by defendant to purchase and pay \$625 for a fortieth part of "Mallet's Improved Bell Telegraph," defendant knowing that the right to said invention was claimed at the time by Timothy D. Jackson and A. Judson, and that a suit brought by them was pending in the United States Court at the time to test the said patent; that plaintiff tendered back the share in said patent and asked for a return of his money, which was not made and action is brought.

In defence, it is denied that Mr. C. knew that there was any doubt in regard to the patent, or that there was any suit pending, or that he made any false representations. He says that he was employed to sell a part of Mr. Howland's interest, and referred plaintiff to Mr. H., and that plaintiff, after examination, purchased. The complaint was dismissed.

Measuring the Area of a Circle.

Permit me, through the columns of the "Scientific American," either to correct an error or to be myself corrected. In No. 12, of the present volume, were given some good practical rules for finding the area of a circle, illustrated by two examples. If I mistake not, however, there was an arithmetical error in the latter proposition, which stands thus:— $4 \times 22 = 88 + 7 = 126.7$; instead of twelve and four sevenths; which latter number would quadruple exactly with that in the former proportion. H. F. Spring House, Montgomery Co., Pa.

[You are perfectly right sir, and we thank you for calling our attention to the subject.—We saw the error also, but too late for correction in that number; we intended to make the correction in our next, but forgot to do so. We make no excuse, for the error should not have been made; it teaches us to be more watchful of our language.

A more minute rule than the one given above to find the circumference of a circle, when the diameter is given, and thus find out its area, is the following:—"The circumference of a circle is to the diameter, as 3.14159 is to 1."

This rule we have always used ourselves, it requires more figures than the other, and this was the reason we did not present it, as the other is sufficient for all practical purposes.—What is the circumference of a cylinder, 6 feet in diameter; $6 \times 3.14159 = 18.84954$. Old Rule. $7 \div 22 \times 6 = 18.67$.

The Illustrated Weekly Record of the New York Exhibition of the Industry of all Nations.

Edited by E. Silliman, Jr., and C. R. Goodrich. G. P. Putnam & Co., of this city, having been selected as printers and publishers extraordinary to the the Crystal Palace Association, undertook the publication of the above work, which we have briefly noticed during its progress. We are inclined to think that the "Illustrated Record" has not received from the public that degree of appreciation it so justly deserves; this has undoubtedly compelled the publishers to restrict the quantity of matter originally intended for it. The number before us embraces 15, 16, 17, and 18, although no larger than two single numbers ought under different circumstances to have been. The necessity which exists for its abridgement is to be regretted in a strictly artistic sense is the most meritorious work ever undertaken here.

There is, we think, one good reason only for its apparent failure, viz., the dull and heavy character of the articles. *Classicality, want of condensing power, absence of the right sort of stamina which makes up the Peoples' Instructor*, too much learning in abstractions are incapable of satisfying the universal thirst which now prevails for the arts and sciences. The editors, although able men in their proper spheres, were evidently never intended for this particular species of intellectual labor. Notwithstanding this defect the work deserves support. The engravings which have graced its columns are generally of the first order in point of mechanical execution, reminding us of the designs illustrated in the celebrated "London Art Journal," and the public are indebted to Messrs. Putnam & Co., for the stimulus which they have given to the wood engraving art, an art which is rapidly supplanting all other processes for beauty, rapidity, and excellence.—The "Illustrated Record" will make a very handsome volume, and we hope the public will feel interested in its circulation. The numbers bound will make a beautiful volume of the useful and ornamental—fit for the library or the center table.

Treatment of Trees in Cold Weather.

We occasionally hear of people being quite at a loss to know what to do with trees received in a cold time, or when the ground is frozen. The way is, either deposit the packages in a cellar as they are received, or open them and set the roots in earth until the weather changes or a trench may be made in the open ground, even if the surface must be broken with a pickaxe, and the trees laid in until they can be planted. They may remain in this state quite safe all winter. Every season, we receive packages of trees from Europe in mid-winter, and we find no difficulty in taking care of them in this way.

—[Horticulturist.]