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# No. 111,

# For the Week ending February 16, 1878.

Price 10 cents. To be had at this office and of all newsdealers. 1. ENGINEERING AND MECHANICS.—Improved Electro-Magnetic Rail-way Brake. 2 illustrations.—Improved Hand Power Rock Drill. 5 il-lustrations, showing the machine as adapted to Mining, Sinking, and Ouserving lustra. Quarry New

New Double-action Vertical Steam Engines, with Boiler. 12 illustra-

New Double-action Vertical Steam Engines, with Double. Maintain Steam Engines, with Double actions of the subject, with description of each improvement and its working. The demand for Engines of this kind, the uses to which they may be put, and the proper direction of invention. The dynamic Ram. By C. L. HET. History of its invention and improvement. The latest improvements, with mode of operation, and 8 illustrations.
 II. ARCHITECTURE AND BUILDING.—The Quadrangle, Muir College, Allahabad, India. 1 eng. -A Concrete Building Dwelling House. An account of a Dwelling constructed entirely of Concrete, with cost, economy of construction, etc.
 III. TECH NOLOGY.—Hank Dycing, Washing, or Sizing Machine. 3 illustrations.

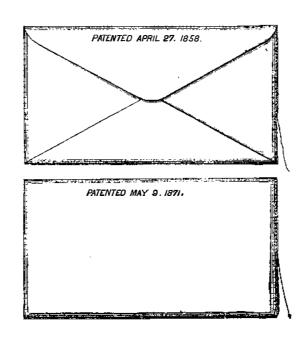
III. TECHNOLOGY.-Hank Dyeing, Washing, or Sizing Machine. 3 illus-trations.-Nicholson Blues.-Cochineal Red Printing on Woolens. By

# Scientific American.

## A PATENT OFFICE COURT.

The Commissioner of Patents recommends, in his report, that the present system of appeals be abolished, and that "a Patent Court be established in connection with the office, to be composed of three members, appointed as other judges duties and establish uniform precedents.

shall have a standing in court-and this would be the char- the U.S. Treasury, leaves a total balance of \$1,114,222.40. acter of the proposed establishment-certainly possesses the charm of novelty; but it assumes a more important and reassuring aspect when it is remembered that the grave and weighty questions which so often threaten the average examiner with premature baldness may by this plan be subjected to the learned judicial mind in banc. Perhaps, armed with microscopes, their Honors will be able to demonstrate to lower orders of intelligence the hidden principle which underlies the granting of patents on infinitesimal distinctions, as exemplified in the envelope-opener case illustrated herewith. In 1858 Mr. Charles Phelps obtained a patent for a letter-opener, consisting of a thread placed in a crease of the envelope, as shown in the upper figure of our engraving. In 1871 Mr. Henry Gregg obtained a patent for a letter-opener, consisting of a thread placed in a crease of the envelope, as shown in the lower figure of our engravize. In either case, to open the envelope you pull the thread so as to make it cut the paper. Unwary intelligence, ignorant of the profundity with which the Patent Office burrows into these subjects, would rashly assert that here was no difference; but the lynx-eyed genius of that institution pityingly points to a knot in the thread, to be found on our lower figure by the aid of a magnifying glass, and triumphantly issues a patent on that. Single minds cannot constantly be subjected to such stress, and a court is the obvious remedy.



Nothing short of a bench of gown-clad judges learned in the law can consistently grapple with such claims as that of Mr. Joseph A. Griffin, of Syracuse, N.Y., who, on December 7, 1875, patented the "compound as a substitute for eggs." What, for instance, are such simple legal questions as are involved in contingent remainders, the "rule in Shelley's case," and cestui qui trusts, beside the consideration of "ten parts cream tartar, three parts tartaric acid, one part alum, nine parts bicarbonate of soda," besides additions of "curcuma, sulphur, sugar, gum arabic, and starch?" It must be clear that nothing but the longest practice in digesting law can fit

 Technologo, Hank Dyeing, Washing, or Sizing Machine. 3 illustrations. -Micholago Buesz-Cochineal Red Printing on Woolens. By M. Status Tell. - Hank Dyeing, Washing, or Sizing Machine. 3 illustrations. - Micholago Buesz-Cochineal Red Printing on Woolens. By M. Status Tell. - Buest Hank Dyeing Washing, or Sizing Machine. 3 illustrations. - Micholago Buesz-Cochineal Red Printing on Woolens. By M. Status Tell. - Hank Dyeing Washing, or Sizing Machine. 3 illustrations. - Micholago Buesz-Cochineal Red Printing on Woolens. By M. Status Tell. - Hank Dyeing Washing, or Sizing Machine. 3 illustrations. - Micholago Buesz-Cochineal Red Printing on Woolens. By M. Status Tell. - Hank Dyeing Washing, or Sizing Machine. 3 illustrations. - Micholago Buesz-Cochineal Notes. - Micholago Buesz-Cochineal Red Printing on Woolens. By M. Status Tell. - Hank Dyeing Washing, or Sizing Machine. - Micholago Buesz-Cochineal Notes. - Micholago Buesz-Cochineal Red Printing on Woolens. By M. Status Tell. - Hank Dyeing Washing, or Sizing Machine. 3 illustrations. - Micholago Buesz-Cochineal Red Printing on Woolens. By M. Status Tell. - These Hang Status the forming Exception State or Territory does not exceed 1 in 1,000. The Commissioner states, representations of the Group Res. - Albert Hank Tell. Bay rockers, combined hair crimpers and hog scratchers, and their By DR. Citt. - Micholago Buesz-Cohange Buesz-Cohang baby rockers by the light of the back numbers of the Patent. The Commissioner has only in this case to issue an order Office Gazette the common law, and the Revised Statutes? that hereafter models will not be required except in such Certainly not. Let us have that court, and at the same time special instances where they may seem necessary, as indicated above. No new legislation is necessary. The Comany other complications which will obstruct and muddle the business of the office and provide more expensive and usemissioner has nothing but precedent, which is not obligatory, less officials for the inventors to pay for. to set aside, as under the law applicants are to furnish models None more than ourselves applaud the well-meant efforts when "required by the Commissioner." of Commissioner Spear in the direction of useful reform; but he can readily inform himself of the fact that the great Indestructible Writing Ink. majority of applications for patents are based on very simple An ink that cannot be erased even with acids is obtained devices, and that it is rarely that one is so obscure as to be by the following receipt: To good gall ink add a strong beyond the intelligence of any well versed mechanic. This solution of fine soluble Prussian blue in distilled water being the case, there certainly is, or ought to be, ample abil- : This addition makes the ink, which was previously proof ity among the members of the examining corps to meet all against alkalies, equally proof against acids, and forms a questions which may come before them, and consequently writing fluid which cannot be erased without destruction of a new Patent Court is as unnecessary as it is objectiona- the paper. The ink writes greenish blue, but afterward turns black.-Pharmacist.

### THE ANNUAL REPORT OF THE COMMISSIONER OF PATENTS

From the above document, which has just been sent to Congress, we find that the amount of moneys received during the year from all sources was \$732,342.85. The expenditures of the United States Courts now are." The Commissioner were \$610,475.12, which is less than any year since 1871, notsays that this tribunal would relieve him of his judicial withstanding the expenses incurred during the fire. The receipts exceeded the expenditures by \$121,867.73, which, added The idea of a court sitting to discover whether a party to the present surplus to the credit of the Patent Office in The following shows the business of the office for 1877:

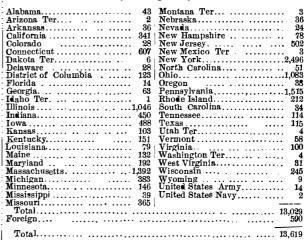
Applications for patents and designs Patents and designs issued	
Applications for reissues	639
Patents reissued	
Patents extended	2.809
Patents allowed, but not issued for want of	, -
final fee	807
Application for trademark registration Trademarks registered	$1,416 \\ 1.216$
Applications for registering labels	632
Labels registered	392

The Commissioner states that the photo-lithographing of the back issues of the old patents is still going on, and it is hoped that by the end of next March the tracing of the entire number of old drawings will be completed, ready for the photo-lithographers. In connection with this he suggests that the specifications of the back numbers of patents should also be printed, and asks for \$20,000 for a commencement of this important work, which is very much needed.

There is a falling off in the business done by the office as compared with some previous years, but this the Commissioner attributes to the fact that the increased facilities which the office by its publications has afforded the public for examination into the state of the various arts have affected and will continue to affect to a great extent the number and character of applications as well as of patents. A less number of applications covering old fields of invention will be filed, and a corresponding improvement will be found in the character of patents granted.

This is undoubtedly true, and is excellent evidence of the double advantage of publishing complete illustrated descriptions of all patents obtained as widely and at as cheap a price as possible. They spread valuable information among the public, and enable inventors to keep posted, both as to the most recent advances in invention and also as to the tendency of inventive genius, for, as we have pointed out before, invention runs in grooves, and there appear to be times when the world is ripe for certain original ideas, and these often simultaneously appear from different sources. The recent simultaneous discovery of the possibility of liquefying the so-called permanent gases by two investigators is another remarkable example in point of the workings of this possible law of invention.

The following table shows the number of patents issued to each State and Territory during the year:



balt and Nickel. -Determination of Oils.
 V. ELECTRICITY, LIGHT, HEAT, ETC.-New Arrangement for Distinguishing the Axes of Double Refracting Substances. By H. C. SORBY, F. R. S. Read before the Royal Microscopical Society. -Magnetization of Tubes of Steel. By J. M. GAUGANN.-Velocity Meter, or Self-registering Tachometer. I illustration.
 Simultaneous Transmission in Opposite Directions. By M. GIOVANNI MARINI. 1 illustration. -Electric Currents of High Tension. By M. GASTON PLANTE. Interesting Experiments, and 7 illustrations. By M. JABLOCKKOFF.-The Transmission in Opposite Directions of the Plant. Interesting Experiments, and 7 illustrations. Battery in which the Electrode Attacked is of Charcoal or Coke. By M. JABLOCKKOFF.-The Transmission e-Modification of Bell's Telephone. By M. FROUVE.-New Single Liquid Battery.-Action of Light upon Oxalic Acid.
 M. M. M. DUVGLENE -On Rotern Litter Currents of the Distory.

- VIAND AUM.
  VI. MEDICINE AND HYGIENE. -On Rotary-lateral Curvature of the Spine. By Professor LEWIS A. SAYRE. Lecture delivered at Belleven the topstital, N.Y. Self-suspension, and the Latest and Best Practice and its beneficial Results as illustrated by several cases. Chance of the Lip. Wasit communicated by a Dentist's Instruments? By C. W. DULLES, M.D.
- W. DOLLES, M.D. I. ASTRONOMY.-The Modern Telescope. No. II. By J. N. LOCKYER. The Defining Power; Adjustment; Diffraction Rings; Appearance of Saturn, with 4 illustrations. List of Stars to be Seen by a Telescope of Sinches aperture. Excellent Instructions for the Amateur. VII.
- VIII. CHESS RECORD.—Herr Meyer and the Clipper Tourney of 1876, with Portrait, and three of his Problems.—New York vs. Philadelphia, two games.—Solutions to Problems.

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