

COMMUNICATIONS RECEIVED.

The Editor of the SCIENTIFIC AMERICAN acknowledges, with much pleasure, the receipt of original papers and contributions upon the following subjects:

- On a Telescope of Unlimited Power. By J. L. and by J. T.
On Engines and Boilers. By H. McM.
On Pisciculture. By C.
On the Canal Navigation Problem. By W. B. D.
On an Accidental Discovery. By W. H. R.
On Adjusting Journal Boxes. By W. L. C.
On Dreams. By J. L. W.
On Left Handed People. By G. W. C.
On Mental Arithmetic. By F. H. R.
On the Prismoidal Railway. By G. W. G.
On a Figure Exercise. By A. F.
On Magic Squares. By E. B., and by J. E. W.
On the Nebular Hypothesis. By J. S. L.
On Trees as Historians. By G. P.
On Antiquity of the Earth. By H. V. M.
On a Theory of the Tides. By J. N. V.

Also enquiries from the following:
M. F.—L. F.—E. C. H.—J. McL.—A.—S. W. C.
Correspondents in different parts of the country ask: Who makes small hay presses? Who sells stoves that burn naphtha as fuel? Who makes bars of steel to be used instead of bells? Makers of the above articles will probably promote their interests by advertising, in reply, in the SCIENTIFIC AMERICAN.

Correspondents who write to ask the address of certain manufacturers, or where specified articles are to be had, also those having goods for sale, or who want to find partners, should send with their communications an amount sufficient to cover the cost of publication under the head of "Business and Personal" which is specially devoted to such enquiries.

[OFFICIAL]

Index of Inventions

FOR WHICH

Letters Patent of the United States

WERE GRANTED IN THE WEEK ENDING

December 2, 1873,

AND EACH BEARING THAT DATE.

[Those marked (r) are reissued patents.]

Table listing inventions such as Axle for vehicles, Battery, Beds, etc., with corresponding page numbers.

Table listing inventions such as Gun, battery, Gunpowder, Hair, machine for heading, etc., with corresponding page numbers.

APPLICATIONS FOR EXTENSIONS.
Applications have been duly filed and are now pending

for the extension of the following Letters Patent. Hearings upon the respective applications are appointed for the days hereinafter mentioned:

27,357.—TABLE CUTLERY.—J. W. Gardner. Feb. 18.
27,392.—FOLDING AND PASTING MACHINE.—G. K. Snow. February 18.
27,403.—STEAM & FIRE REGULATOR.—J. Woodruff. Feb. 18.

EXTENSION GRANTED.

26,339.—WATER WHEEL.—J. P. Collins.
DISCLAIMER.
143,201.—SEAL LOCK.—J. E. Thomas, Buffalo, N. Y.

DESIGNS PATENTED.

7,005.—BUCKLE.—J. R. Smith, Waterbury, Conn.
7,006.—PENCIL CASE.—E. Todd, Brooklyn, N. Y.
7,007 to 7,014.—STOVES.—N. S. Vedder et al., Troy, N. Y.
7,015.—CLOCK CASE.—G. H. Blakesley, Bristol, Conn.
7,016.—STATUARY.—J. Rogers, New York city.
7,017.—FAN.—W. A. Smith, Niagara Falls, N. Y.

TRADE MARKS REGISTERED.

1,545.—DRY GOODS.—Emery & Co., New York city.
1,546.—HARDWARE, ETC.—T. Hessenbruch, Phila., Pa.
1,547 to 1,562.—WATCHES.—National Watch Co., Elgin, Ill.
1,563.—LINIMENT.—I. Vallier, New York city.
1,564.—MEDICAL COMPOUND.—Moyer & Co., Phila., Pa.

SCHEDULE OF PATENT FEES.

Table listing fees for various patent services: On each Caveat, On each Trade Mark, On filing each application for a Patent, etc.

CANADIAN PATENTS.

LIST OF PATENTS GRANTED IN CANADA ON DECEMBER 10, 1873.

Table listing Canadian patents with details: 2,921.—W. A. Gibbs, Gilwell Park, Essex county, Eng., and A. Borwick, Lloyd's, London, Eng. Improvement on apparatus and arrangements for drying, called "Gibbs & Borwick's Improvement on Apparatus for Drying." Dec. 10, 1873.

HOW TO OBTAIN Patents and Caveats IN CANADA.

PATENTS are now granted to inventors in Canada, without distinction as to the nationality of the applicant. The proceedings to obtain patents in Canada are nearly the same as in the United States. The applicant is required to furnish a model, with specification and drawings in duplicate. It is also necessary for him to sign and make affidavit to the originality of the invention.

Postal order. Do not send the money in the box with model. Give us your name in full, middle name included. Inventions that have already been patented in the United States for not more than one year may also be patented in Canada. On filing an application for a Canadian patent the Commissioner causes an examination as to the novelty and utility of the invention. If found lacking in either of these particulars, the application will be rejected, in which case no portion of the fees paid will be returned to the applicant. Inventors may temporarily secure their improvements in Canada by filing caveats; expense thereof, \$35 in full. For further information about Canadian patents, assignments, etc., address MUNN & CO., 37 Park Row, New York.

Advertisements. RATES OF ADVERTISING. Back Page - - - - - \$1.00 a line. Inside Page - - - - - 75 cents a line. Engravings may head advertisements at the same rate per line, by measurement, as the letter-press.

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JUDSON'S PATENT LATHE CHUCK was awarded a diploma, by the American Institute Fair at New York. 873. DWIGHT ROBERTS, MFR. Wythe Ave., Brooklyn, N. Y.

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WHERE TO WINTER—EAST, West, North, or South—for Health and Comfort. THE SCIENCE OF HEALTH for January gives particulars; also, "How to Get Well and Keep Well," "Illustrations of the Human Body, in parts;" "Heenan, the Puglist;" "Do We Murder Our Daughters?" "Corsets;" "Over Study;" "Heritage of Woe;" "Goblins of Pathology;" "The Sleeping Beauty;" "Economy of Health;" "Night Air;" "Country Girls;" "How to Preserve One's Complexion;" "The Secret Revealed." New vol. No. 1 ready, 1874, 20c. Only \$2 a year. Address S. E. WELLS, No. 389 Broadway, New York.

THE SCIENCE OF HEALTH is the only illustrated and thoroughly INDEPENDENT Health Magazine now published. It teaches how to live healthfully. The American Turbine Water Wheel. Recently improved and submitted to thorough scientific tests by James Emerson, showing the following useful effect of the power of the water utilized, being the highest results ever known. Percentage of Part Gate: 1/4, 50.08; 1/2, 69.64; 3/4, 78.73; 4/5, 82.53; 5/6, 82.90. Per cent. of Whole Gate: 83.14. A full report may be obtained of STORR, MILLS & TEMPLE, Dayton, Ohio.

