

- H. R., of Mass .-- You state that your shellac varnish is opaque and brittle. You probably used inferior alcohol to dissolve the lac. Rectified alcohol alone should be employed as the solvent, in order to form transparent varnish. Apply it in very thin coats and allow each to dry perfectly before the other is put of
- H. J. and E. H. B., of N. Y .- A substitute for transparent mica, for stoves and similar purposes, would be valuable. The principal defect of mica is its laminating quality, it splits so readily into fine scales. We are not acquainted with any substitute for mica that possesses fire-proof, translucent and flexible qualities.
- J. P. S., of N. Y .- You ask our opinion respecting the best oil for mowers and reapers, and state that the greatest difficulty which you have encountered, is the quick dispersion of any oil which you have applied to the cogs and knives, "it flies off so quickly." You also state that you have employed expensive castor oil in the expectation that it would stay on longer and be fully cheaper on this account than lard oil. The best lubricators for mowers is a question deserving much attention. It cannot be solved by theory careful experiments with different lubricators, can alone determine which oil or mixtures of oils and grease is the best. The best lubricators known to us for fine machinery, is pure sperm oil, but you want adhesiveness as well as good lubricating qualities. A mixture of dissolved india rubber and coal oil may be a good lubricator for owers. Give it a trial.
- A. C., of N. Y.—The pulp of potatoes scraped into water cleanses the finest kinds of silks without injury to the fabric or color.
- B. G. of Vt .- You can make a good blue ink by taking three drachms of Chinese blue (terrocyanide of iron) and grind itup with one dram of binoxalate of potash and seven ounces of water. Usually about one dram of gum is added to these quantities
- D. A. R., of Conn.—To drive away and keep rats from corn-cribs and granaries, place some gas-tar in them, and daub some in their holes, and they will leave the premises at once. The tar can be obtained at any place where gas is manufactured
- J. A., of Cal.-We think you can obtain Johnson's PracticalDraughtsman of W. H. Townsend & Co., of this city. We do not know the price of Silliman's Philosophy. It is published by H. C. Peck, of Philadelphia. We should think it worth about \$1.50
- G. H. M., of N. Y .- About 82 lbs. of powder are used for a common 42-pound spheroidal shot; much less, however, is frequently used; it all depends upon the range and penetration re-
- G. W. P., of Mass .- King's work on Propellers is a valuable one for you to study in order to fit you for becoming a naval en-
- J. B. W., of Mass.—The mineral which you have sent us consists mostly of iron pyrites, and is of no value.
- E. P., of Ghio .- Kaolin will not make a superior hard soap when used as a substitute for rosin, because it is an insoluble sub stance. Soapstone dust may answer your purpose as a substitute for kaolin
- H, W., of Ohio.-In Russia very little turpentine or varnish is used in their paints. They use the curi of milk mixed with pigments; it is more durable and less dangerous on account of fires. A very excellent, fire-proof wash for outside buildings is made of clay stirred up in water containing about an ounce of potash for every five gallons. This wash is excellent for the boiler rooms of
- J. R. W., of Conn.-A steam floating ram for destroying war vessels is not new. You will find the description of such a vessel on page 167. Vol. I. new series Scientific American. Elongaset on page 100, vol. 1, new series schemich Aberdan. Blonga-teal bullets and bolts for rifles are not such modern missiles as you suppose. They have been borrowed from the Genoese cross-bow; and Robbins, the author of a work on gunnery, suggested the employment of such bullets for rifles in 1741. Breech-loading cannot are certainly the most convenient and safe for loading with percussion shell
- R. R. T., of N. Y .- A composition of 9 parts by weight of zinc and 12 of lead, is very good for the expanding bands of iron can non shot. This alloy, for such purposes, was patented by Capt. J. Lawrence, in England, in 1852.
- C. S. P., of Maine. Box is the wood principally used in wood engraving. The logs are sawed in pieces just the length of type, about nine-tenths of an inch. One of the surfaces is made very smooth and covered with a very thin white paste. Upon this surface the picture is drawn with a pencil, and then the engraver cut, out the parts that are to be left white. The block is set in the form with the types and the raised surfaces receive the ink from the roller as it is passed over the form.
- B. F. N., of N. Y. -The battle of Marengo was the one at which a portion of the French army fled in such confusion with great difficulty that Napoleon rallied the fugitives behind the
- M. A. W., of N. J.-Good black waint, containing some fine emery, makes a most excellent composition for blackboards used in school rooms. The paint should be put on in three succes sive coats, each allowed to dry perfectly. The silicate of potash (soluble glass) mixed with the oxyd of zinc makes a good composi tion for white writing boards for school rooms. It is not so easily put on the wall, however, as the paint. Be careful and use very fine emery, and if you put a coat of varnish on the top of the paint, you mix some emery with it also.
- W. S. K., of Penn .- A battery of small guns forming a stack or organ gun, is one of the oldest forms of a war engine. A few years since Sir John Shaw revived this invention in England, | invention has been previously secured by patent in some other counusing rifled guns for the old smooth bores. It caused some talk at the time, but it has since fallen into deserved silence owing to defects in its principle of construction,

- 'H. S., of N. Y .- The experiments made with the Armng gun at Shoeburyness, Eng.. by which iron bars, eight and ten inches thick, placed as a target, were broken, should not be taken as proof against good plates of the same thickness being as easily broken. It has now been ascertained that the bars were imper fectly secured, therefore the experiments were valueless as a guide respecting the resistance against shot of good plates well secured in a ship
- T. Van D., of N. J .- The sample of ore which you have sent to us contains traces of copper, but it will require a quantitive analysis to determine whether or not it would pay
- N. M. L., of C. W.-We hope you will use all your influence to obtain a reform in the Canadian Patent Laws, so as to per mit the citizens of the United States to obtain Canadian patents. A great number of new and useful improvements for the benefit of Canada would soon be introduced if protection were given to onr citizens
- -We advise you to get a tubular boiler of the first quality for your engine. A cheap boiler is generally n expensive and dangerous man-trap and fuel-consumer.
- H. B., of Vt.-In casting your bullets always heat the mold before you commence to pour in the lead, or else the bullets will have a very uneven surface. The best formed bullets are struck out of solid lead, in dies, by machinery. Every bullet cast in a m should be afterwards subjected to a few blows from a hammer is
- G. P. C., of N. Y.—Cotton requires to be prepared with a more ant for dyeing analine colors, but not silk. The common more ant used is nitrate of lead and corrosive sublimate in solution.

TO OUR READERS.

Models are required to accompany applications for Patents under the new law, the same as formerly, except on Design Patents, when two good drawings are all that is required to accompany the petition, specification and oath, except the government fee

INVARIABLE RULE.—It is an established rule of this office to stop sending the paper when the time for which it was pre-paid

PATENT CLAIMS.—Persons desiring the claim of any invention which has been patented within thirty years, can obtain a copy by addressing a note to this office, stating the name of the pat entee and date of patent, when known, and inclosing \$1 as fee for copying. We can also furush a sketch of any patented machine issued since 1853, to accompany the claim, on receipt of \$2. Address MUNN & C., Patent Solicitors, No. 37 Park Row, New York.

BINDING .- We are prepared to bind volumes, in handsome covers, with illuminated sides, and to furnish covers for other bind ers. Pricefor binding, 50 cents. Pricefor covers, by mail, 50 cents by express or delivered at the office, 40 cents.

BACK NUMBERS AND VOLUMES OF THE SCIENTIFIC AMERI-CAN .- Volumes I., II. and III. (bound or unbound) may be had at this office and from all periodical dealers. Price, bound, \$1.50per volume. by mail, \$2—which includes postage. Price in sheets, \$1. Every mechanic, inventor or artisan in the United States should have a complete set of this publication for reference. Subscribers should not fail to preserve their numbers for binding.

NEW PAMPHLETS IN GERMAN.-We have just issued a re vised edition of our pamphlet of Instructions to Inventors, containing a digest of the fees required under the new Patent Law, Ac., printed , which persons can have gratis dress MUNN & CO., an language, cation to this office. Address

No. 37 Park-row, New York.

of grant.

INSTRUCTIONS ABOUT EUROPEAN PATENTS, With a Synopsis of the Patent Laws of the Various Countries.

AMERICAN INVENTORS SHOULD BEAR IN MIND that, as a general rule, any invention which is valuable to the patentee in this ountry is worth equally as much in England and some other foreign countries. Four patents-American, English, French and Belgian—will secure an inventor exclusive monopoly to his disc ery among 100,000,000 of the most intelligent people in the world. The facilities of business and steam communication are such that natents can be obtained abroad by our citizens almost as easily as at home. The majority of all patents taken out by Americans in foreign countries are obtained through the Scientific American Patent Agency. have established agencies at all the principal European seats of ernment, and obtain patents in Great Britain, France, Belgium, Prus sia, Austria, Spain, &c., with promptness and dispatch.

It is generally much better to apply for foreign patents simultane ously with the application here; or, if this cannot be conveniently done, as little time as possible should be lost after the patent is issued, as the laws in some foreign countries allow patents to any one who first as the laws in some totagine during a low particles to any inventors are deprived of valid patents for their own inventions.

Many valuable inventions are yearly introduced into Europe from the many valuable investibles are years in into the case the base properties of the alert to pick up whatever they can lay their hands upon which may seem useful.

Models are not required in any European country, but the utmost care and experience is necessary in the preparation of each case.

GREAT BRITAIN.

Patents for inventions under the new law, as amended by the act of oct. 1, 1852, and now in operation, include the United Kingdom of Great Britain and Ireland in one grant, which confers the exclusive right to make, use, exercise or vend. This is conceded to the inventor, or the introducer, for a period of fourteen years, subject, after the patent is granted, and the first expenses paid, to a government tax twice during its existence—ence within three years, and once again within seven. The purchaser of a patent would assume the payment of these taxes.

seven. The purchaser of a patent would assume the payment of these taxes.

There is no provision in the English law requiring that a patented invention shall be introduced to to public use within any specified limit Under the Patent Act of October, 1852, the British government relinquished its right to grant patents for any of its colonies, each colony being permitted to regulate its own patent system. If a patent has been previously taken out in a foreign country, the British patent will expire with it.

FRANCE.

FRANCE.

Patents in France are granted for a term of fifteen Years, unless the try; in such case, it must take date with and expire with the previous patent. After the patent is issued, the French government requires the payment of a small tax each year so long as the patent is kept allow, and two years' time is given to put the invention patented into practice.

It should be borne in mind that, although the French law does not require that the applicant should make oath to his papers, yet if a patent should be obtained by any other person than the inventor, upon proof being adduced to this effect before the proper tribunal, the patent would be declared illegal.

BELGIUM.

Patents in Belgium are granted for twenty years, or if previously patents in Begrum are granted not twenty years, or it previously patented in another country, they expire with the date thereof. The working of the invention must take place within one year from date of patent; but an extension for an additional yearmay be obtained on application to the proper authorities. Inventors are only legally entitled to take out patents.

THE NETHERLANDS

Patents are granted by the Royal Institute of the Netherlands to natives or foreigners represented by a resident subject, which extend to a period of about two years, within which time the invention must be brought into use, and upon payment of an additional tax, a patent will be granted to complete its whole term of fineen years. Unless these conditions are complied with, the patent ceases.

PRUSSIA

Applications for patents in Prussia are examined by the Royal Polytechnic Commission, and unless there is novelty in the invention, the applicant's petition will be denied; and if it is granted, the invention must be worked within six months afterward. A respite, however, of six additional months may be obtained, if good and sufficient reasons for it can be shown. AUSTRIA.

Austrian patents are granted for a term of fifteen years, upon the payment of 1,000 florins, or about \$500 in American currency. This sum, however, is not all required to be pard in advance. It is usual to pay the tax for the first five years upon the deposit of the papers, and the patent must be worked within its first year. The Emperor can extend the patent and privilege of working by special grant. In order to obtain a patent in Austria, an authenticated copy of the original Letters Patent must be produced.

SPAIN.

The duration of a Spanish patent of importation is five years, and can be prolonged to ten years; and the invention is to be worked within one year and one day.

obtain a Cuban patent requires a special application and an extra

RUSSIA.

Since the close of the Crimean war, considerable attention has been given to Russian patents by Americans. Russia is a country rich in mineral and agricultural products, and there seems to be a field open inhera and agricultural products, and there seems to be a feel open forcertain kinds of improvements. The present Emperor is very liberally disposed toward inventors, and as an evidence of the inverse which hetakes in the progress of mechanic arts, we may state that we have had visits from two distinguished Russian sacars, specially sent out by the Emperor to examine American inventions. As Russian patents are expensive, and somewhat difficult to obtain, we do not take it upon ourselves to advise applications: inventors must judge for themselves; and this remark applies not only to Russia, but also to all other toreign countries.

CANADA. CANADA.

atents of invention are granted only to actual residents of Canada and British subjects. Under the general Patent Law of Canada, an American cannot procure a patent for his invention there. The only way terican cannot procure a patent for his invention there. The only way which he can do so isby virtue of a special act of Parliament, which is y difficult, uncertain, and expensive to obtain. Several zealous ends of reform in Canada are working earnestly to bring about a rerocallaw, but their efforts have thus far proved fruitless.

BRITISH INDIA.

The date of the law, Feb. 28, 856; duration of a patent, fourteen

Invention must be worked within two years from date of petition. Privilege granted only to the original inventor or his authorized SAXONY. Duration of patent, from five to ten years. Invention must be

worked within one year from date of grant. Careful examination made before granting a patent.

HANOVER. Duration of patent, ten years; and in case of foreign patent having been previously obtained, an authenticated copy of said patent mist be produced Invention must be worked within six months from date

SARDINIA

Duration of patent, from one to fifteen years. Patents for five years or less must be worked within one year, and all others within two

NORWAY AND SWEDEN.

Duration of patent, three years, at least; fitteen at most, according to the nature and importance of the invention. Patents for foreign inventions not to exceed the term granted abroad, and to be worked within one, two or four years.

AUSTRALIA.

Date of law, March 31, 1854. Careful examination made by competent persons previous to issue of patent, which, when granted, extends to fourteen years. Imported inventions are valid according to duration of foreign patent. It would require from twelve to eighteen months to procure a patent from the Australian government. Parties holding foreign patents secured through our agency will be notified from time to time of the condition of their cases.

GENERAL REMARKS.

While it is true of most of the European countries herein specified, that the system of examination is not so rigid as that practised in this country, yet it is vastly important that inventors should have their papers prepared only by the most competent solicitors, in order that they may stand the test of a searching legal examination; as it is a common practice when a patentee finds a purchaser for his invention for the latter to cause such examination to be made before he will ac

It is also very unsafe to entrust a useful invention to any other than a solicitor of known integrity and ability. Inventors should beware of speculators, whether in the guise of patent agents or patent brokers, as they cannot ordinarily be trusted with valuable inventions.

as they cannot ordinarily be trusted with valuable inventions.

Mesers, MUNN & Co. have been established fifteen years as American and Foreign Paten Attorneys and publishers of the Scientific American, and during this time they have been entrusted with some of the most important inventions of the age; and it is a matter of particular to the control of the most important inventions of the age; and it is a matter of particular to the control of the most important inventions of the age; and it is a matter of particular their agents in London, Paris, and other Continental cities, are among the oldest and most reliable Patent Solicitors in Europe, and they will have no connection with any other.

CAUTION.—It has become a somewhat common practice for agents located in England to send out circulars soliciting the patronage of American inventors. We cannot the latter against heeding such approaching or they may otherwise fall into the hands of presponsible parties, and thus he definition of their rights. It is much safer for inventors to calculate their cases to the care of a competent, reliable agent at home.

Figure —The fees required by us for the preparation of foreign applied.

At home.

Fees.—The fees required by us for the preparation of foreign applications are not the same in every case; as, in some instances, when the inventions are of a com licated character, we are obliged to charge a higher fee. Applicants can always depend however, upon our best terms, and can learn all particulars upon application, either in person or by letter.

Parties desiring to procure patents in Europe can correspond with the undersigned, and obtain all the necessary advice and information respecting the expenses of obtaining foreign patents.

All letters should be addressed to Mesers. MUNN & CO., No. 37 Park-row, New York.

CHANGE IN THE PATENT LAWS

SEVENTEEN YEARS.

The new Patent Laws, recently enacted by Congress, are now in full force, and promise to be of great benefit to all parties who are concerned in new inventions.

The duration of patents granted under the new act is prolonged SEVENTEEN years, and the government fee required on filing an applion for a patent is reduced from \$30 down to \$15. Other changes the fees are also made as follows :-

the fees are also made as follows:

On filing each application for a Patent, except for a design. \$15
On filing each application for a Patent, except for a design. \$15
On issuing each original Patent. \$20
On application for Re-issue. \$20
On application for Re-issue. \$30
On application for Extension of Patent. \$50
On granting the Extension of Patent. \$50
On filing Disclaimer. \$10
On filing application for Design, three and a half years. \$10
On filing application for Design, seven years. \$15
On filing application for Design, fourteen years. \$30
The law abolishes discrimination in fees required of foreigners, except in reference to such countries as discriminate against citizens of the United States—thus allowing English, French, Belgian, Austrian,

the United States-thus allowing English, French, Belgian, Austrian, Russian, Spanish, and all other foreigners except the Canadians, to enjoy all the privileges of our patent system (except in cases of designs) on the above terms

During the last sixteen years, the business of procuring Patents for new inventions in the United States and all foreign countries has been conducted by Messrs. MUNN & CO., in connection with the publication of the SCIENTIFIC AMERICAN; and as an evidence of the confidence reposed in our Agency by the Inventors throughout the country, we would state that we have acted as agents for more than FIFTEEN THOUSAND Inventors! In fact, the publishers of this paper have become identified with the whole brotherhood of Inventors and Patentees, at home and abroad. Thousands of Inventors for whom we have taken out Patents have addressed to us most flattering estimonials for the services we have rendered them, and the wealth which has inured to the Inventors whose Patents were secured through this Office, and afterward illustrated in the SCIENTIFIC AMERICAN, would amount to many millions of dollars! We would state that we never had a more efficient corps of Draughtsinen and Specification Writers than are employed at present in our extensive Offices, and we are prepared to attend to Patent business of all kinds | Patents, after careful examination into the facts, can be had for a in the nickest time and on the most liberal terms.

Testimonials.

The annexed setters, from the last three Commissioner of Patents we commend to the perusal of all persons interested in obtaining Pat

Messrs. Munn & Co. :—I take pleasure in stating that, while I held the office of Commissioner of Patents, more than one-fourth of all the business of the office came through your hands. I have no doubt that the public confidence thus indicated has been fully deserved, as I have always observed, in all your intercourse with the Office, a marked degree of promptness, skill and fidelity to the interests of your employers.

Yours, very truly,

CHAS MASON CHAS. MASON.

Immediately after the appointment of Mr. Holt to the office of Postmaster-General of the United States, headdressed to us the subjoined very gratifying testimonial: Messrs. Munn & Co.:—It affords me much pleasure to bear testimony to the able and efficient manner in which you have discharged your duties of Solicitors of Patents while I had the honor of holding the office of Commissioner. Your business was very large, and you sustained (and, I doubt not, justly deserved) the reputation of energy, marked ability and uncompromising fidelity in performing your professional engagements.

Very respectfully,

Your obedient servant,

J. HOLT.

Messrs. Munn & Co.:—Gentleman: It gives me much pleasure to say that, during the time of my holding the office of Commissioner of Patents, a very large proportion of the business of inventors before the Patent Office was transacted through your agency, and that I have ever found you faithful and devoted to the interests of your clients, as well as eminently qualified to perform the duties of Patent Attorneys with skill and accuracy. Vary respectfully,

Your obedient servant, WM. D. BISHOP.

The Examination of Inventions.

Persons having conceived an idea which they think may be patent able, are advised to make a sketch or model of their invention, and submitit to us, with a full description, for advice. The points of novelty are carefully examined, and a reply written corresponding with the facts, free of charge. Address MUNN & CO., No. 37 Park-row, New York.

Preliminary Examinations at the Patent Office.

The advice we render gratuitously upon examining an invention does not extend to a search at the Patert Office, to see if a like invention has been presented there, but is an opinion based upon what knowledge we may acquire of a similar invention from the records in our Home Office. But for a fee of \$5, accompanied with a model or drawing and description, we have a special search made at the United States Patent Office, and a report setting forth the prospects of obtaining a Patent, c., made up and mailed to the Inventor, with a pamphlet, giving in structions for further proceedings. These preliminary examinations are made through our Branch Office, corner of F and Seventh-streets, Washington, by experienced and competent persons. Over 1,500 of these examinations were made last year through this Office, and as a measure of prudence and economy, we usually advise Inventors to have a preliminary examination made. Address MUNN & CO., No. 37 Park-row, New York.

Caveats.

Persons desiring to file a Caveat can have the papers prepared in the shortest time by sending a sketch and description of the invention. The government fee for a Caveat, under the new law, is \$10. A pam phlet of advice regarding applications for Patents and Caveats furnished gratis on application by mail. Address MUNN & CO., No. 37 Park-row New York.

How to Make an Application for a Patent.

Every applicant for a Patent must furnish a model of his invention, if susceptible of one; or if the invention is a chemical production, he must furnish samples of the ingredients of which his composition is composed, for the Patent Office. These should be securely packed, the Inventor's name marked on them, and sent, with the government fee, by express. The express charge should be prepaid. Si a distance can often be sent cheaper by mail. The safest way to remit money is by draft on New York, payable to the order of Munn & Co. Persons who live in remote parts of the country can usually purchase drafts from their merchants on their New York correspondents; but if not convenient to do so, there is but the risk in sending bank bills by mail, having the letter registered by the postmaster. Address MUNN CO. No. 37 Park-row, New York.

Rejected Applications.

We are prepared to undertake the investigation and prosecution of re-NEW ARRANGEMENTS---PATENTS GRANTED FOR jected cases, on reasonable terms. The close proximity of our Washington Agency to the Patent Office affords us rare opportunities for the examination and comparison of references, models, drawings, docu ments &c. Our success in the prosecution of rejected cases has been very great. The principal portion of our charge is generally left de pendent upon the final result.

All persons having rejected cases which they desire to have prosecuted are invited to correspond with us on the subject, giving a brief history of their case, inclosing the official letters, &c.

Foreign Patents.

We are very extensively engaged in the preparation and securing of Patents in the various European countries. For the transaction of this business, we have offices at Nos. 66 Chancery-lane, London: 29 Boule vard St. Martin, Paris; and 26 Rue des Eperonniers, Brussels. We think we can safely say that THREE-FOURTHS of all the European Pat-

ents secured to American citizens are procured through our Agency.

Inventors will do well to bear in mind that the English law does not limit the issue of Patents to Inventors. Any one can take out a Patent

Circulars of information concerning the proper course to be pursued in obtaining Patents in foreign countries through our Agency, the requirements of different Patent Offices, &c., may be had gratis upon application at our principal office. No. 37 Park-row, New York, or either

Interferences.

We offer our services to examine witnesses in cases of interference, o prepare arguments, and appear before the Commissioner of Patents orin the United States Court, as counsel in conducting interferences or appeals.

Furnished free. Address MUNN & CO., No. 37 Park-row, New York.

The Validity of Patents.

Persons who are about purchasing Patent property, or Patentees who are about erecting extensive works for manufacturing under their Patents, should have their claims examined carefully by competent attorneys, to see if they are not likely to infringe some existing Patent, be-tore making large investments. Written opinions on the validity of reasonable remuneration. The price for such services is always settled upon in advance, after knowing the nature of the invention and being informed of the points on which an opinion is solicited. For rtherparticulars, address MUNN & CO., No.37 Park-row, New York.

Extension of Patents.

▼a uable Patents are annually expiring which might be extended and oringfortunes to the households of many a poor Inventor or his family. We have had much experience in procuring the extension of Patents: and, as an evidence of our success in this department, we would state that, in all our immense practice, we have lost but two cases, and these were unsuccessful from causes entirely beyond our control.

It is important that extension cases should be managed by attorney of the utmost skill to insure success. All documents connected with extensions require to be carefully drawn up, as any discrepancy or untruth exhibited in the papers is very liable to defeat the application.

Of all business connected with Patents, it is most important that extensions should be intrusted only to those who have had long expe vience, and understand the kind of evidence to be furnished the Patent Office, and the manner of presenting it. The heirs of a deceased Patentee may apply for an extension. Parties should arrange for an application for an extension at least six months before the expiration of

Forfurtherinformation as to terms and mode of procedure in obtaining an extension, address MUNN & CO., No. 37 Park-row, New

Assignments of Patents.

The assignment of Patents, and agreements between Patentees and anufacturers, carefully prepared and placed upon the records Patent Office. Address MUNN & CO., at the Scientific American PatentAgency, No. 37 Park-row, New York.

It would require many columns to detail all the ways in which the Inventor or Patentee may be served at our offices. We cordially invite all who have anything to do with Patent property or inventions to call at our extensive offices, No. 37 Park-row, New York, where any questions regarding the rights of Patentees, will be cheerfully answer

Communications and remittances by mail, and models by express prepaid), should be addressed to MUNN & CO., No. 37 Park-row, New

RATES OF ADVERTISING.

Thirty Cents per line for each and every insertion, payable in advance. To enable all to understand how to calculate the amount they must send when they wish advertisements published, we will explain that ten words average one line. Engravings will not be admitted into our advertising columns; and, as heretofore, the publishers reserve to

SWISS DRAWING INSTRUMENTS.—CATALOGUE (7TH edition), containing over 250 illustrations of Mathematical, optical and Philosophical Instruments, with attachment of a large sheet representing the genuine Swiss Instruments, in their actual size and shape, will be delivered on application to all parts of the United States (gravis), by C. T. ANSLER, No. 635 Chestnut-street, Philadelphia, Pa., cstablished agency for the Swiss or awing Instruments since 1545.

Being about to retire from business, I have sold my stock of Swiss Mathematical Instruments to Messrs. McALLISTER & BROTHER, of No. 728 Chestnut street, Philadelphia, who will continue to keep such for sale, and to whom I refer my former friends and customers.

C. T. AMSLER.

PUMPS! PUMPS!! PUMPS!!!—CARY'S IMPROVED Rotary Force Pump, unrivaled for pumping hot or cold liquids. Manufactured and sold by CARY & BRAINERD, Brockport, N. Y. Also, sold by J. C. CARY, No. 2 Astor House, New York City. 14tf

A MESSIEURS LES INVENTEURS AVIS IMPOR-A fant. Les Inventeurs den familiers avec la largue Anglaise in qui préféreraient nous communiquer leurs inventions de Franquis, pou-vent ond audicesser dans leur langue natale. En opyet unus un dessin et une description comise pour hotre examen. Tentes communica-tions seront regius en comfidence. XUNN & CO., Scientific American Office, No. 37 Parlarow, New York.

DOPULAR LECTURES BY POPULAR MEN.

The following lectures have appeared in late numbers of the sector diversal, copies of which can be had, price four cents each, in any news agent, or from the publishers direct, on receipt of post-

rrom any news agent, or from the publishers direct, on receipt of postage stamps:

"The Beauties of Poetry." By Emerson Bennett, Esq. In No. 19.

"The Oratorof Nature." By Rev. T. L. Cuyler. In No. 18.

"The Chemistry of the Atmosphere." By Prof. J. P. Cook, Jr. Iu No. 17.

"Money." By B. S. B. C. S. J. T.

17. Money." By R. S. De Cordova, Esq. In No. 16. America West of the Mississippi." By Hon. Horace Greeley. In 15.

"America West of the MISSISTEPP." By Mr. Siddons. In No. 14.
"Richard Brimstey Sheridan." By Mr. Siddons. In No. 14.
"Spanish America." By W. J. Dix, Esq. In No. 16.
"Society and its Burders." By Rev. H. W. Beecher. In No. 12.
"The Moral Value of Washington's Character." By Rev. C. H. Fay. In No. 11.

n No. 11.

"Algernon Sidney." By Rev. Dr. Thompson. In No. 10.

"Man and his Work." By Rev. E. H. Chapin. In No. 9.

"The Women of the Revolution." By Rev. T. Armitage. In No. 8.

"Lights and Shadows of London Life." By J. B. Gough. In No. 7.

"Italy and Gaubaldi." By Colchas Hicks. In No. 6.

"The Scenery of the Andes." By W. J. Dix, Esq. In No. 5.

"The Uses of Astronomy." By Hon. Edward Everett. In No. 4.

"The Wonders of God in Nature." By. Prof. I. P. Cook, Jr. In C. 3.

"Self Help," By Timothy Titcatnb, (Dr. 1 J. Holland). In No. 2.
"The World's Highway,"—with Map of the World. By Dr. Solger.
In No. 1.

A lecture is published every number, weekly. Annual subscriptions, & Weekly Nos., four cents. Monthly parts, II cents. Publishers, A. HARTHILL & CO., No. 20 North Wittiam Street, New York.

TLAX COTTON—PREMIUMS.

The Rhode Island Society for the Encouragement of Domestic Industry offer the following:

A premium of thirty dollars for a bale of not less than fifty pounds of the best prepared Flax Cotton, fit for use on cotton machinery, accompanied with a statement of its culture, production and preparation, inclinding cost of the various processes.

A premium of twenty dollars for the second best bale of the same, on the same conditions.

A premium of (wenty dollars) or the second best bale of the same, on the same conditions.

The bales to be delivered at the rooms of the Society on or before Sept. 11, 1861. The premiums will be awarded by the Standing Committee at their meeting to be held on the third Wednesday in September, and paid as soon as awarded.

The Society will defray all the necessary expenses of transportation on the bales of proper size offered for premiums, and will claim the right to retain the same at their pleasure, on payment of a fair price. The flax cotton will be open for public examination at the Exhibition of Vegetables, Fruits and Flowers, to be held by the Society at Railroad Hall, September 11, 161.

Railroad Hall, September 11, 161. The W.R. STAPLES, See'y. Communications upon this subject may be addiessed to the Secretary of the Society, or to eather of the following persons as the Special Committee of the Society upon Flax Culture, &c.

James Y. Smith, Providence.

Willam Viail, William Sprague, Providence.

Willam Viall,
His Excellency, Willam Sprague, Providence.
Balley W. Evans,
Robert S. Burrengh,
Edward Harris, Woonsocket,
Elisha Dyer, Providence, Chairman,
ryman B. Frieze,
Secretary.

TRON PLANERS, ENGINE LATHES, AND OTHER MAchinists Tools, of superior quality, on hand and finishing, and for ow; also, Harrison's Graim Mills. For descriptive circular, ad NEW HAVEN MANUFACTURING CO., New Haven, Conn.

UILD & GARRISON'S STEAM PUMPS, FOR ALL kinds of independent steam pumping; for sale at Nos. 55 and 57 First-street, Williamsburgh, L. I., and No. 74 Beekman-street, New York. [126]

Solid SMERY VULCANITE.—WE ARE NOW MANU—

Solid Smery Francisch of this remarkable substance for cutting grinding and polishing metals, that will outwear hundreds of the kind commonly used, and will do a much greater amount of work in the same time, and more efficiently. All interested can see them in operation at our warehouse, or circulars describing them will be numbed by mail.

NEW YORK BELTING AND PACKING CO.,

1 13 Nos. 37 and 3.8 Park-row, New York.

OIL! OIL! OIL!—FOR RAILROADS, STEAMERS AND
for Machinery and Burning.—Pease's Improved Machinery and
Burning Oil will save fifty per cent, and will not gum. This Oil possesses qualities vitally essential for lubricating and burning found
in no other oil. It is offered to the public upon the most reliable, thorough and practical test. Our most skillful engineers and machinists
pronounce it superior to and cheaper than any other, and the only Oil
that is in all cases reliable and will not gum. The Schentific American,
after several tests, pronounces it "superior to any other they have ever
used for machinery." For sale only by the inventor and manufacturer,
F. S. PEASE,
No. 61 Main-street, Buffalo, N. Y.

F. S. PEASE,
No. 61 Main-street, Buffalo, N.
N. B.—Reliable orders filled for any part of the United State

MACHINE BELTING, STEAM PACKING, ENGINE
HOSE.—The superiority of these articles, manufactured of vulcanized rubber, is established. Every belt will be warranted superior
to leather, at one-thref less price. The Steam Packing is made in every
variety, and warranted to stand 390 degs. of heat. The Hose never needs
oiling, and is warranted to stand any required pressure: together with
all varieties of rubber adapted to mechanical purposes. Directions, prices,
&c., can be obtained by mail or otherwise at our warehouse. NEW
YORK BELTING AND PACKING COMPANY.

1 13

Nos. 37 and 38 Parterow, New York.

ELECTRIC WEATHER INDICATOR.—THIS NEAT and curious instrument foretells the weather from 12 to 24 hours and curious instrument foretells the weather from 12 to 24 hours n advance. Sent free by mail for 50 cents, by addressing the manufac-urers, LEE & CO., Newark, New Jersey. Liberal discount to agents. 32*

C. HOFF'S PATENT IMPROVED DEODERIZED fully put up and shipped to any part of the United States, with full printed directions for use. It is adapted to steep or flet roofs; is fireproof. State and commy rights for sale. Address the inventor and proprietor, C. C. HOFF, Poughkeepsie, N. Y.

NEW SHINGLE MACHINE—THAT WILL RIVE AND Shave 24.000 Shingles in a day, for sale by S. C. HILLS, No. 2 Platt-street, New York.

PORTABLE STEAM ENGINES—6, 8 AND 10-HORSE at \$590, \$625 and \$750. For sale by S. C. HILLS, No. 12 Platt-street, New York.

BAR IRON AND STEEL OF ALL KINDS, SIZES AND shapes, for sale in any quantity for each or on time. N. B.— Ulster bar iron of all sizes for machinery, &c. EGLESTON, BAT-TELL & CO., No. 166 South-street, New York.

Bur Beachtung für deutsche Erfinder.

Die Unterzeichneten baben eine Anfeitung, die Erfindert.
Die Unterzeichneten baben eine Anfeitung, die Erfindern bas Berhalten anzielt, um fich ihre Patente zu sichern, herausgegeben, und verabsolgen solche graifs an dieselben.
Erstuder, welche nicht mit der englischen Sprache bekannt sind, tönnen ihre Mittheitungen in der kentschen Sprache maden. Etizzen von Erfindungen mit furzen, deutlich geschriebenen Beschreibungen beliebe man zu abbressieren an

Munn & Co., 37 Part Row, Rem Jork.

Auf ber Office wird beutich gefprochen.

Dafelbit ift gu haben :

Die Patent-Gesetze der Bereinigten Staaten,

nebt ben Regeln und ber Geichäftsordnung ber Vatent-Diffice und Anleitungen für ben Erfinder, um fich Patente gu ficheru, in ten Ver. St. sowell als in Europa. Armer Ausguge aus ben Patent-Wefeten fremder Länder umb barauf Ceganick Rathfoldage; ebenfalls nühliche Winte fur Erfinder und solche, welche patentiren wollen.
Preis 20 Cts., per Poft 25 Cts.