41,815.—Preparation of a Phosphate of Lime for Culin-ary and other Purposes.—E. N. Horsford, Cam-bridge, Mass., assignor to John H. Cheever, New York City: I claim this double phosphate of lime of the composition and pre-paration substantially as above described for the uses above set forth.

41,816.-Current Water Wheel.-Jerome B. Howe (as-signor to himself and Josiah C. Richards), Middle-ville, Mich.: I claim in the construction of a submerged vertical shaft current water wheel, the combination of the hinged buckets, d d, and braces, e, e, ara nged and operating substantially as and for the purposes herein specified.

41,817.—Lock.—Casper Jagy & Frederick Denzler (assignors to Walter K. Marvin), New York City: We claim the tumbler, I, provided with the pendants, J, in combination with the plate, D, bolt, B, and knob arbor, G, all arranged to operate in the manner substantially as and for the purpose herein set forth.

41,818.—Cutting Tool for Turning.—Asa S. Libby, Man-chester, N. H., assignor to Gordon McKay, Boston

chester, N. H., assignor to Gordon Acnay, Bosson, Mass.: I claim the described cutting tool when constructed and made so as to operate substantially as set forth. 41,819.—Apparatus for distilling and rectifying Whiskey and other Spirits.—Elijah Freeman Prentiss, Phila-delphia, Pa., and Robert Adam Robertson, Liver-pool, England : we claim, first, The arrangement and combination of the cham-bers, 1 and 2, whereby the liquid to be distilled is made to act as a cooling medium i. chamber I, and as a regulating medium in cham-ber 2, substantially in the manner described. Second The employment of chamber No. 2, in combination with the regulator or its equivalent for maintaining any constant or de-sind temperature, substantially as described. "Philo, the construction of the shelves in chamber, 4 substantially as described.

Fourth, The construction of the state of the second state of the s

and before conditions, and before condensation, substancially as unscribed.
Fifth, We claim the employment of chamber, 3, for raising the wash before it is introduced into chamber, 4, to a greater heat than said wash petrone it is introduced into chamber, 4, to a greater heat than usel wash before it is introduced into chamber, 4, to a greater heat than usel wash before it is introduced into chamber, 4, to a greater heat than usel wash before it is introduced into chamber, 4, to a greater heat than usel washed washed by the stantially as the form of the stantially as set forth.
41,001 - Water Wheel.-D. S. Stephens (assignor to same the stantially as set forth.

stantially as set forth.
41,321.—Water Wheel.—D. S. Stephens (assignor to himself and Charles Seymour), La Porte, Ind.: I claim, first, The bucket, B, placed longitudiually on the shaft, A, with inclined planes, a, between them, in combination with the curved or spiral buckets, C G placed at each end of the buckets, B, and the latter encompassed by chutes, E, all being placed within a box or penstock, D, and arranged as and for the purpose specified. Second, The inclined planes, a, a, placed on the shart, A, between the buckets, B, when used in connection with the buckets, C C, box or penstock, D, and chutes, E, substantially as and for the purpose set forth.

[This invention relates to an improved water-wheel of that class in which the direct and reactive force of the water is obtained, and it

consists in the employment or use of a series of buckets which are placed longitudinally on the shaft with inclined planes between them in combination with a series of curved or spiral buckets at each end of the longitudinal buckets, the latter being encompassed by chutes for directing the water properly upon them, and all placed within a box or penstock, whereby it is believed that on economical wheel is obtained and one that will give out a large per-centage of the effective wer of the water.]

41,822.—Machine for making Augers.—Mary Tower, (administratrix of the estate of Isaiah Tower, de-ceased), Rochester, N. Y.: I claim a series of plates constructed and operating in the manner and for the purpose substantially as herein described and repre

1,823.—Cement for sealing Preserve Cans.—Joseph B. Wilson (assignor to himself and John B. Moore), Fisherville, N. J.: I claim a sealing cement composed of the ingredients and in the namer described. 41.823.

DESIGNS.

4.—Jacket for Lamp Burners.—Charles Deavs (as-signor to Archer & Pancoast), New York City : 1,904. 1,905.—Spool-holder for Sewing Machines.—John G. Folsom, Winchendon, Mass.:

1,906.-Macaroni Spoon.-Webb Harding, Cambridge

Mass.: 1,907. -Floor-cloth Pattern. John Neil (assignor to

Wm. M. Brasher & S. H. Herriman, Clinton, Mass.: 98.—Floor-cloth Pattern.—Joseph Robley (assignor to Brasher, Herriman & Co.), Brooklyn, N. Y.: 1,908.

EXTENSION.

Meat-cutting Apparatus.—John G. Perry, South Kings-ton, R. 1. Patented 'Feb. 26, 1850. Re-issued Feb. 25, 1862 : Iclaim, first, The use and employment of the studs, s s, Fig. 3, with one or both of the discharge openings, LL, substantially as de-scribed and for the purpose here in set forth. Second, I claim combining the knives and space blocks with the case of a meat-cutter, in the manner substantially as herein de-scribed and for the purposes set forth.

TO OUR READERS.

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 patentee and date of patent, when known. and enclosing \$1 as fe for copying. We can also furnish a sketch of any patented machine issued since 1853, to accompany the claim, on receipt of \$2. Address MUNN & CO., Patent Solicitors, No. 37 Park Row, New York

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

MODELS are required to accompany applications for Patents under the new law, the same as formerly, except on design pat ents, when two good drawings are all that are required to accompany the petition, specification and oath, except the Government fee

RECEIPTS .- When money is paid at the office for sub ons, a receipt for it will always be given : but when subscriber scripti remit their money by mail, they may consider the arrival of the first pa er a *bona-fide* acknowledgement of our reception of their funds.



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GRANTED

In connection with the publication of the SCIENTIFICAMERICAN, have act-

ed as Solicitors and Attorneys for procuring "Letters Patent" for new inventions in the United States and in all foreign countries during the past seventeen years. Statistics show that nearly ONE-THIRD of all the applications made for patents in the United States are solicited through this office; while nearly THREE-FOURTHS of all the patents taken in foreign countries are procured through the same source. It is almost needless to add that, after sevencen years' experience in pr paring specifications and drawings for the United States Patent Offic the proprietors of the SCIENTIFIC AMERICAN are perfectly con versant with the preparation of applications in the best manner, and the transaction of all business before the Patent Office; but they take pleasure in presenting the annexed testimonials from the three oners of Patents :-

last ex-Commissioners of Patents :--MESSRS, MUNN & CO. -- Lake pleasure in stating that, while 1 hel the ofice of Commissioner of Patents, MORE TERN ONE-FOURTH O ALL THE EUSINESS OF THE OFFICE CAME TREOOCH YOUR HANDS. Have no doubt that the public confidence thus indicated has bee fully deserved, as 1 have always observed, in all your intercourse wit the office, a marked degree of promptness, skill, and fidelity to th interests of your employers. Yours very truly; CHAS. MASON.

Judge Mason was succeeded by that eminent patriot and statesman, Hon. Joseph Holt, whose administration of the Patent Office was so distinguished that, upon the death of Gov. Brown, he was appointed to the office of Postmaster-General of the United States. Soon after entering upon his new duties, in March, 1890, he addressed to us the following very gratifying jetter: MsssRs. MUNN & Co.:-It affords me much pleasure to bear testi-mony to the able and efficient manner in which you discharged your duties as Solicitors of Patents, while I had the honor of holding the office of Commissioner. Your business was very large, and you sus-tamed (and I doubt not justly deserved) the reputation of energy, marked ability, and uncompromising fidelity in performing your pro-fessional engagements.

Very respectfully, your obedient servant, J. HOLT.

Hon. Wm. D. Bishop, late Member of Congress from Connecticut, succeeded Mr. Holt as Commissioner of Patents. Upon resigning the office he wrote to us as follows: MISSES, MUNN & CO. .--If gives me much pleasure to say that, dur-ing 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 inave 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. Very respectfully, your obedient servant, WM. D. Bishop. dient servant, WM. D. BISHOP.

THE EXAMINATION OF INVENTIONS.

Persons having conceived an idea which they think may be patent submit it to us, with a full description, for advice. The points of novelty are carefully examined, and a written reply, corres with the facts, is promptly sent, free of charge. Address MUNN & CO., No. 37 Park Row, New York.

CO., No. 37 Park Row, New York. As an evidence of the confidence reposed in their Agency by in-ventors throughout the country, Messrs. MUNN & CO. wordd state that they have acted as agents for more than TWENTY 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 they have taken out pat ents have addressed to them most flattering testimonials for the ser vices rendered them; and the wealth which has inured to the individ uals whose patents were secured through this office, and afterwards illustrated in the SCIENTIFIC AMERICAN, would amount to many millions of dollars! Messrs. MUNN & CO, would state that they minions of dollars: Messix, Morris a convolution state and one of the second state and the se that they are prepared to attend to patent business of all kinds in the time and on the most liberal terms.

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The service which Messrs, MUNN & CO, render gratuitously upon reservice which messes, mark a co. relater graduations, upon examining an invention does not extend to a search at the Patent Office, to see if a like invention has been presented there; but is an opinion based upon what knowledge they may acquire of a similar invention from the records in their Home Office. But for a fee of \$5, companied with a model, or drawing and description, they have a scial search made at the United States Patent Office, and a report spe setting forth the prospects of obtaining a patent, &c., made up mailed to the inventor, with a pamphlet, giving instructions for further proceedings. These preliminary examinations are made through the Branch Office of Messrs. MUNN & CO., corner of F. and Seventh streets, Washington, by experienced and competent per sons. Many thousands of such examinations have been made through 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 consists. for the Patent Office. These should be securely packed, the ingentor's name marked on them, and sent, with the Governme fees, by express. The express charge should be pre-paid. Small needs from a distance can often be sent cheaper by mail. The safest way to remit money is by a draft on New York, payable to the order of Messrs- 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 little risk in sending bank bills by mail, having the letter re-tered by the postmaster. Address MUNN & CO., No. 37 Park R New York.

Patents are now granted for SEVENTEEN years, and the Government fee required on filing an application for a patent is \$15. Other change in the fees are also made as follows :--

On filing each Caveat	n
On filing each Caveat	5
On issuing each original Patent	n
On appeal to Commissioner of Patents	an
On application for Re-issue	su.
On application for extension of Patent	50
On granting the Extension	50
On filing a Disclaimer.	n
On filing application for Design (three and a half years). \$1	้ก
On filing application for Design (three and a half years)\$1 On filing application for Design (seven years)\$1	iŠ.
On filing application for Design (fourteen years)	ň

The Patent Laws, enacted by Congress on the 2d of March, 1861, are now in full force, and prove to be of great benefit to all parties who

are concerned in new inventions. The law abolishes discrimination in fees required of foreigners, ex-cepting natives of such countries as discriminate against citizens of the United States-thus allowing Austrian, French, Belgian, English, Russian, Spanish and all other foreigners, except the Canadians, to enjoy all the privileges of our patent system (except in cases of de signs) on the above terms. Foreigners cannot secure their investion by filing a caveat; to citizens only is this privilege accorded.

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Persons desiring to file a caveat can have the papers prepared in the hortest time by sending a sketch and description of the invention The Government tee for a caveat is \$10. A pamphlet of advice re garding applications for patents and caveats is furnished gratis, ou application by mail. Address MUNN & CO., No. 37 Park Row New

EXTENSION OF PATENTS.

Many valuable patents are annually expiring which might readily be extended, and if extended, might prove the source of wealth to their fortunate posses be extended, and it extended, might prove the source of weath we their fortunate possessors. Messrs. MUNN & CO. are persuaded that very many patents are suffered to expire without any effort at extension, owing to want of proper mformation on the part of the patentes, their relatives or proper momentaria and the mode of proce-dure in order to ootain a renewed grant. Some of the most valuable grants now existing are extended patents. Patentees, or, if deceased, their heirs, may apply for the extension of patents, but should give ninety days' notice of their intention.

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Messrs. MUNN & CO. are prepared to undertake the investigation and prosecution of rejected cases, on reasonable terms. The close proximity of their Washington Agency to the Patent Office affords them rare opportunities for the examination and comparison of ref-erences, models, drawings, documents, &c. Their success in the prose cution of rejected cases has seen very great. The principal portion of their charge is generally left dependent upon the final result.

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SEARCHES OF THE, RECORDS.

ccess to all the official records at Washington, pertaining to Having ac the sale and transfer of patents, MESSRS. MUNN& CO., are at all times ready to make examinations as to titles, ownership, or assign of patents. Fees moderate.

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wered. Communications and remittances by mail, and models by express (prepaid) should be addressed to MUNN & CO. No. 37 Park Row, New Vork

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