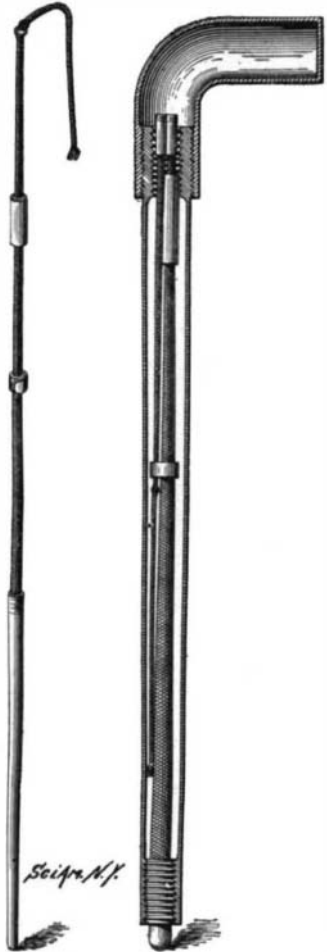




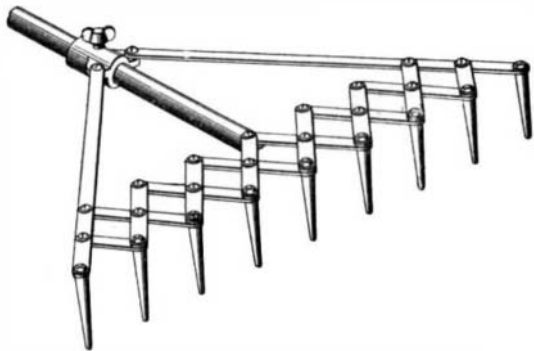
**ODDITIES IN INVENTIONS.**

**COMBINATION CANE AND WHIP.**—A walking-cane which may be readily converted into a whip, or vice versa, has been recently invented by Mary A. Allen, of Fitzgerald, Ga. It comprises an article useful either in walking or driving, and consists essentially of a cylindrical casing adapted to contain a folded whip. An end portion covers the top of the casing, to exclude all dirt and dust and also to serve as a handle for the article when used as a cane. The whip is divided into two hinged sections, which are adapted to be folded together for insertion into the casing, a small spring catch engaging the lash. When the whip is extended for use, the sections are made rigid at the joint by a sliding sleeve, which is moved over the hinge, telescoping and securely holding the same. The butt of the whip is threaded to fit either of the two internally-threaded portions at each end of the casing. A small lug projecting from the buttend of the whip serves as a ferrule when the article is used as a cane.



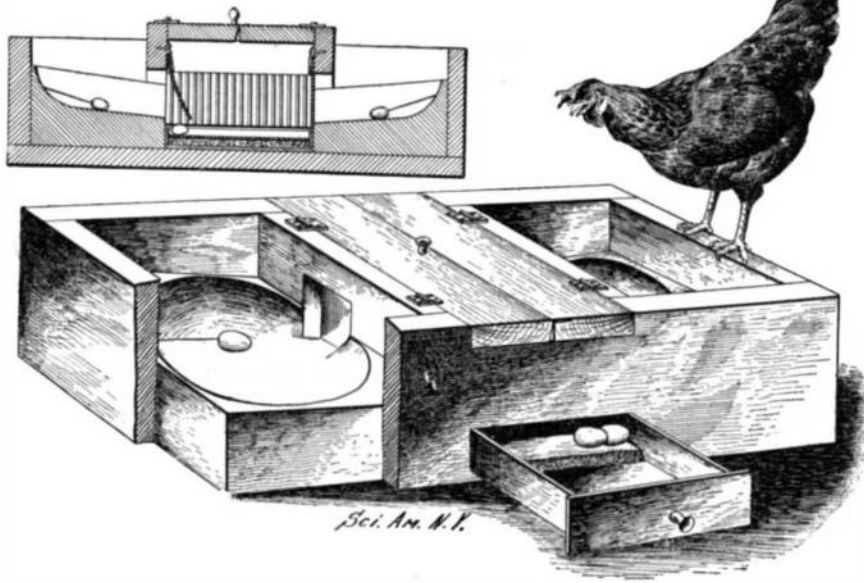
**CANE AND WHIP COMBINED.**

A **FOLDING HAND-RAKE.**—It can hardly be denied that the ordinary rake takes up an inconvenient



**AN ADJUSTABLE AND FOLDABLE RAKE.**

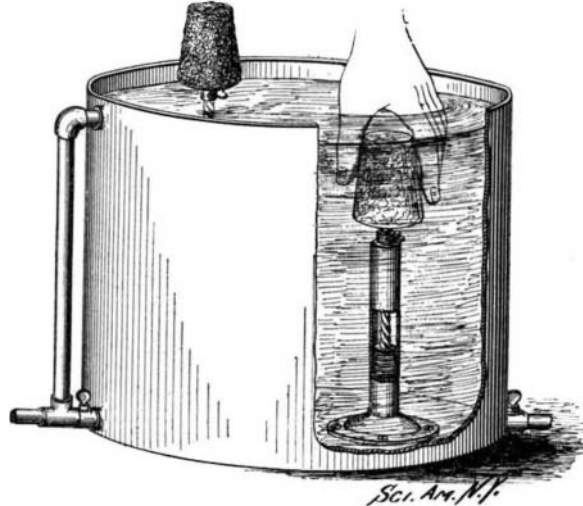
amount of room in a barn. A Kentuckian has sought to overcome this inconvenience in a most ingenious way. He mounts the teeth of his rake on links pivoted together after the manner of lazytongs, and connects



**AN EGG-COLLECTING NEST.**

the lazytongs thus formed with a collar sliding on the handle of the rake. By shifting this collar along the handle it is possible to adjust the width of the rake, and to bring the tines so close together that little or no room will be taken up when the rake is not in use.

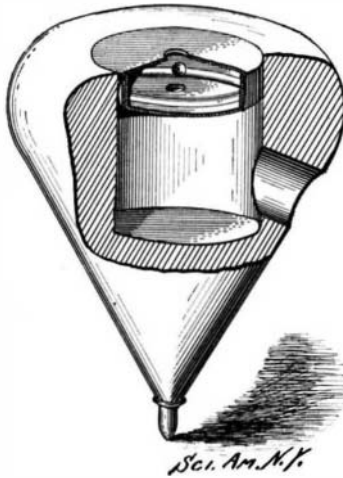
**A MECHANICAL TUMBLER-CLEANER.**—An apparatus for cleaning tumblers which springs from the inventive brain of a Western inventor, will probably be of interest to the hotel and restaurant keeper. Brush-bearing spiral spindles are provided with piston-heads arranged to reciprocate in a cylinder. A coiled spring, contained within each cylinder, abuts against each head. The cylinders and spiral spindles are contained in a tank of water. When the devices are not in use the brushes protrude from the water. The tumbler to be



**A NEW WAY OF CLEANING TUMBLERS.**

cleaned is placed over the brush. By pressing on the brush the spindle is forced down, and is rotated by reason of its spiral formation. When the pressure is removed the coiled spring will lift the brush out of the water.

**WHISTLING AND RINGING TOP.**—A new form of top which both whistles and rings is the invention of a resident of Waltham. The body of the top is formed with a central chamber. The side of the top has a single transverse opening communicating with the lower portion of the central chamber. In the upper end of the chamber a sound-producing device is contained, which is a combined whistle and rattle. The sound-producing device comprises two perforated disks, forming an air-chamber between them. As the top spins the air is sucked through the perforations in the disk into the central chamber and out through the transverse opening, thus producing a whistling-tone. During the rotation of the top a metallic ball or hammer strikes the disks and produces a ringing noise in addition to the whistling sound.



**A WHISTLING AND RINGING TOP.**

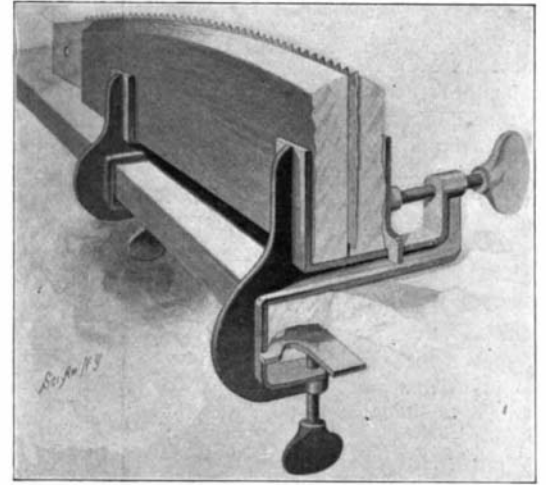
**AN EGG-COLLECTING NEST.**—The nest illustrated is intended automatically to collect eggs which have been laid, in order to prevent a hen from eating them. The nest is divided into three compartments—a central storage chamber and two egg-laying compartments at the side of the storage chamber. The egg-laying compartments are inclined, and communicate with the central storage chamber by means of openings closed by flaps. An egg which has been laid will roll down the incline, push aside the flap, and drop into the cushioned storage compartment, from which it may be removed by means of a drawer. The usual nest-eggs are provided, fastened in place, however, so that they cannot follow the course of the eggs that have been laid.

**A NEW SAW-CLAMP.**

A simple form of saw-clamp which can be carried about readily and used almost anywhere, is an invention for which August J. Jaeger, of Phillips, Wis., recently received a patent.

The frame of the device is shaped like the letter S. At each end of this S eyes are formed for the reception of screws. It will be observed from our illustration that the screws move at right angles to each other. The one serves to operate a movable plate, straddling a slideway, in order to force the plate toward a fixed, flat face. The other screw serves to move a flat plate against a table, in order to clamp the entire device.

In sharpening a saw two clamps are used, as shown in our engraving. Between flat boards shaped to



**THE JAEGER SAW-CLAMP.**

conform with the saw, the blade is placed. The clamps are secured upon the table, and the boards containing the saw are placed between the jaws and the plates mounted on the screws. The screws are all tightened, so that the blade is very securely held in place.

The simplicity of this device and the readiness with which it can be set up for use are features which deserve special mention.

**Prizes for Inventions.**

Several prizes have recently been awarded in connection with various contests organized by the Society for Encouraging National Industry in France for important discoveries in many ramifications of science. The prize of \$400 for the invention of a cement capable of agglomerating diamond dust for mechanical purposes has been awarded, while \$600 was given to the inventor of a steam superheater, which is considered to be a great advance upon any yet placed on the market. An offer of \$400 for what is described as an important progress in the mechanical transmission of work is also made. A prize of \$200 is offered for the practical utilization of any by-product used in chemical processes which is now wasted, and medals are now offered for the publication of papers useful to chemical industry and metallurgy. Prizes are also offered for an apparatus suitable for domestic use, and capable of sterilizing drinking water, and for an effective remedy for freeing the vine tree from an insect parasite which does great harm to it.

In 1898 an international competition for a paste for matches not containing white sulphur was announced, and a prize of 50,000 francs (\$9,650) was offered by the Belgian government to the inventor. The commission appointed to judge results has now declared that, after four years of careful experiment and analysis, it has found that none of the products so far submitted fill the required conditions, being defective in inflammability, igniting on all surfaces, or, in igniting, ejecting inflammable matter containing some poisonous substance. The sum already expended in the matter amounts to 8,178 francs (\$1,578.35). This covers cost of printing, correspondence with foreign countries, purchase of materials, analysis and experiment. Some American inventor ought to apply his mind to the problem.

**Utilization of Coconut Shells.**

There is a chance for some ingenious inventor to devise a means of utilizing coconut shells. We are informed by a coconut dealer of New York city that at the present time the fiber is stripped from the nut and used in the making of matting, but that the shells are used as fuel, simply because there is apparently no industrial use for them. At this late day it would seem almost a wanton waste to destroy anything at all, much less coconut shells. The dealer in question would be glad to place at any inventor's disposal any amount of coconut shells for the purpose of experiment.

## Brief Notes Concerning Patents.

President E. R. Green, of the Texas Midland Railroad Company, has recently been granted a patent on a system of wireless telegraphy. As soon as it is possible to do so, his railroad will be equipped with it.

It has been announced that the American Window Glass Company intends to issue a new lot of common stock for the purpose of obtaining exclusive American rights to a window glass blowing machine. It is said that the machine dispenses with the services of skilled flatteners. The cost of production will be reduced by 50 per cent. Whether any reliance is to be placed upon the report that the owners of the patent rights value their machine at \$10,000,000 cannot at present be determined. The sum certainly seems princely.

There has been a decided boom in the cultivation of rice in the past year or two and many great plantations have been taken up and are being put in shape for business through the South. A large factory for the manufacture of the rice polishing machinery is about to be started in Baltimore, Md. This company has acquired a number of patents, mainly those of Oliver R. Welch, of Baltimore, which makes use of a system of wire mesh belts and screens, and which is said to do the work of polishing the rice grains better and cheaper than by the old process of using belts of sheepskin, known as the "skin process." Rice in the hull is almost black, and when the outer skin is removed the grain is dirty yellowish in appearance. Rice is used almost over the entire world, and the custom of polishing it is general except among the Chinese, who eat it in the yellow stage.

A company has been organized in Chicago, with a capital of \$250,000, known as the Du Vall Underground Railway, which will operate one of the big amusement features of the Louisiana Purchase Exposition at St. Louis. A platform capable of seating 150 persons will be erected, and the performance will begin by the descent of this platform to a point about 50 feet below the surface, although the distance will seem to be greater owing to certain optical illusions which will be introduced on the way down. When the platform comes to a rest a number of realistic representations of different phases of underground work will be shown, including divers at work, the sewers of Paris, the Catacombs of Rome, and gold and coal mines in operation. These different features will be mounted on cars which will move around the spectators, coming into view one after the other. These cars will be 50 feet long, 40 feet in depth and 35 feet wide.

A system by which it is possible to keep in constant telephonic communication with a moving train, was recently tried as an experiment on the Louisville, Henderson and St. Louis Railroad, and the trial was said to have been eminently successful by those who witnessed it. The invention is that of Dr. A. D. Jones, of Louisville, and the wire is laid either at the side of the rail or hung in the air, and the contact is made through an ingenious apparatus which constitutes the main feature of the doctor's invention, and for which a patent was recently granted by the United States. In the test made a few weeks ago, the wire was laid near the track on the ties for a distance of over a mile, and as the train passed along at the rate of ten miles an hour, a number of persons in the city of Louisville were called up on the regular local telephone system, and many of them refused to believe that they were holding a conversation with a person on a moving railroad train. It was said that the words were heard as plainly as over the ordinary wires, and there was no evidence whatever of the motion of the train in the transmission of the message.

Few persons have received patents for so wide a range of subjects as Joseph Beresford Renshaw, who died at Hartford, Conn., early in May. He was a born inventor, and in whatever walk of life he was placed, he immediately adapted himself to the surroundings and soon made some important improvement in the methods of doing the work. He was born in England, and came to this country when quite a young man and located in New York, where he made a number of improvements in loom construction and the methods of working them. He then removed to Detroit, where he connected himself with the Michigan Central Railroad. Here his inventive faculties had full play, and he was responsible for a number of inventions relating to railroad engineering. He finally became the master mechanic at the shops in Michigan City, Ind. He later moved to Cleveland, where he had been offered a place with a firm making optical and scientific instruments, and made several improvements in the telescopes made by them. After this he devised a process by which molten metal was cleansed of all foreign matter by means of centrifugal force, and another for improving the quality of low-grade iron. All of these inventions were of great practical value.

## Legal Notes.

**A LONG DELAYED PATENT CAUSE.**—The report of the Special Master in Chancery in the suit of John E. Dubois against the mayor, aldermen and commonalty of the city of New York, has been filed in the office of the clerk of the United States Circuit Court. This is the last step in a case which has been before the courts for the last eighteen years. John Dubois was the inventor of a caisson which, it is alleged, Roebing made use of in building the Brooklyn Bridge. The patent expired in 1884. A suit was soon after commenced against the city of New York for damages. Dubois began action against other municipal corporations, his cases being classified among lawyers under the general title of "Dubois vs. the Cities."

The case of Jarndyce vs. Jarndyce, of which Dickens has written picturesquely, is no more involved than that of Dubois vs. the city of New York, or more characteristic of the law's delay. In December, 1884, the demurrers to the complaint filed by the corporation counsel were overruled. Then began the taking of testimony. Three years were then consumed by the complainant alone. Meanwhile J. Dubois died, leaving his entire estate, which consisted partly of these causes of action, to his nephew, J. E. Dubois. In 1888 the State passed a statute empowering the cities of Brooklyn and New York, and Dubois, the legatee, each to select a referee. For five years the referees sat. In 1893 they at last handed in a report adverse to Dubois. Then the referees started an independent action in the Pennsylvania federal courts for the purpose of recovering the large sums due to them for services. In 1897 the Pennsylvania federal courts decided the statutory reference illegal and unauthorized, and the referees' report therefore void. As a result, ten years' legal labor went for nothing, and the case had to be retried. For a year the cause was allowed to slumber peacefully. Then new associate counsel was engaged. When two years had elapsed, dissensions sprang up among complainant's lawyers, with the result that the courts were called upon to decide what fees were to be received by the associate counsel. The Master's report which has now been handed in is simply devoted to this question of fees, and does not in any way affect the patent litigation itself. Yet its scope is prodigious, for no less than 700 typewritten pages are needed to state what each counsel shall receive. When the patent cause itself will be decided no one can foretell.

**INFRINGEMENT BY OFFICERS OF THE UNITED STATES.**—An interesting question came up in the case of the International Postal Supply Company of New York vs. Bruce (114 Fed. Rep. 509) as to what is the legal status of an infringement by United States officials. Complainant's bill alleged infringement of certain patents for improvements in machines designed for use in the post offices of the United States, in cancelling stamps and postmarking mail matter. One of the defendants, who is a postmaster, was using in his office two infringing machines under leases from his co-defendants, which leases were about to expire and were to be renewed by defendants. The complainant had tendered to the individual postmaster, for use in his office on the same terms, two machines made under the patent, which tender was refused. When the case came up, the postmaster, who is the only defendant residing within the district, alone appeared, and filed a plea alleging that he never personally used or caused to be used the alleged infringing machines, but that they were constructed for, and placed in his office by the Post Office Department, where they were used by his subordinates, under orders, solely in the service and for the benefit of the United States. The rental of these machines was paid by order of the department from the government funds. The defendant never had control over the leasing of these machines nor the renewal of the leases. In view of these facts, the court held that although on principle it had no jurisdiction, and that complainant was entitled to the remedy invoked, the question of jurisdiction was so far in doubt, in view of the decision of the Supreme Court in *Belknap vs. Schild*, that the plea should be sustained.

**IMITATION OF TRADE-MARK.**—The West Indies Trading Company adopted "El Falco" as a trade-mark designation and brand of cigars manufactured by it in Porto Rico. This was claimed by another manufacturer as an infringement of his trade-mark "El Falcon" an arbitrary or fanciful designation adopted by him twenty years ago, and he began proceedings to restrain its use, bringing out an interesting point. The defense set up that Falco was the name of its manager and they had named their brand after him with his permission. As a matter of fact the manager went by another name. The court said that

while it is true that the law will protect the right of a man to use his name in his own business, even if by so doing he may injure another of the same name, in such cases it must appear that the name was honestly used, and the court will permit no artifice or deceit calculated to mislead the public.

**DEVICE NOT CLAIMED ABANDONED.**—Where a patentee has made his claim, he has thereby disclaimed and abandoned to the public all other combinations and improvements that are not mere invasions of the device, combination, or improvement which he claims. But one who claims and secures a patent for a new machine or combination thereby necessarily claims and secures a patent for every mechanical equivalent of that machine or combination, because, in the light of the patent law, every mechanical equivalent of a device is the same thing as the device itself. Where form is not the essence of the invention, machines or combinations which are constructed upon the same principle, which have the same mode of operation, and which accomplish the same result by the same or by equivalent mechanical means, are mechanical equivalents within the meaning of the patent law, although they differ in form or in name.

**LIABILITY FOR ROYALTY.**—The owner of patents granted a license to manufacture and sell during the term of the patent having the longest time to run, under an agreement that a certain prescribed period during the term the licensee should pay a royalty on all articles sold by him, whether manufactured under the patents or not, and reserving a right to sell on his own account on certain contingencies, and providing that the licensee might manufacture all such instruments as it was licensed to sell. The New York Court of Appeals held that such owner was not deprived of the right to royalty because the licensee transferred the license to a corporation, and ceased to do business, as such corporation, while it continued the manufacture and sale, did so by the authority of the license, rendering the licensee liable to the same extent that he would have been if he had continued the business.

**COMBINATION OF OLD ELEMENTS.**—A new combination of old elements, whereby an old result is attained in a more facile, economical and efficient way, may be protected by a patent. Where the question of novelty is fairly open for consideration under the law, the fact that a patented device or combination has displaced others which had previously been used to perform its function, and had gone into immediate and general use, is pregnant and persuasive evidence that it involves invention. Where the advance toward the desideratum is gradual, and several inventors form different combinations which accomplish the desired result with varying degrees of operative success, each is entitled to his own combination, so long as it differs from those of his competitors and does not include theirs.

**FURNITURE CASTERS.**—The Berkey patent, No. 318,533, for a caster socket provided with an interior spring made integral with one side of the socket and from the same material, the purpose of which is to press against the bulbous head of the caster shank, and prevent it from dropping out when the furniture is raised from the floor, was anticipated by the Kane & Brown patent of 1866, which showed the same spring, except that it was made of a separate piece of metal, and mechanically attached to the socket, holds the United States Circuit Court of Appeals for the Sixth Circuit, basing its decision on the principle that infringement cannot ordinarily be escaped by merely cutting in two a device made in one piece, or by making integral an article formerly made in two.

**CONTRACT TO PAY ROYALTIES.**—N. S. Keith, the inventor of an improved armature for a dynamo electric machine, having secured letters patent therefor, sold the Electrical Engineering Company the right to make, use and sell the invention in California, Colorado, Nevada, Montana, Oregon, Alaska, Utah, Arizona and Idaho. The electrical company agreed to pay royalties on the sale "of all articles manufactured by it under said letters patent." This agreement, the Supreme Court of California has just held, calls for the payment by the company of a royalty on the selling price of the entire electric dynamo machine, with the armature attached, and not merely of the armature alone.

**INJUNCTION AGAINST INFRINGEMENT.**—Where infringement is clearly shown, so as to entitle complainant to a preliminary injunction, and the infringing article is manufactured abroad and imported into this country, complainant has the right to the issuance of the injunction, and to use or publish it for legitimate purposes, notwithstanding the promise of defendant not to purchase or use any more of the articles.