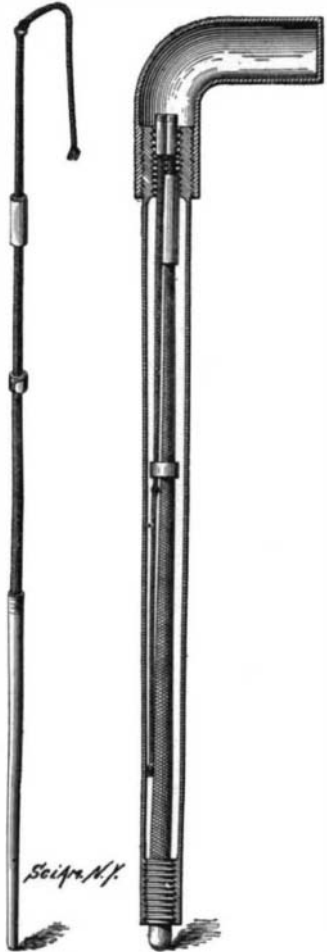




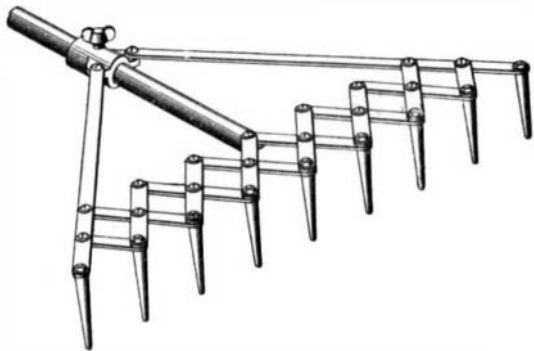
ODDITIES IN INVENTIONS.

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.



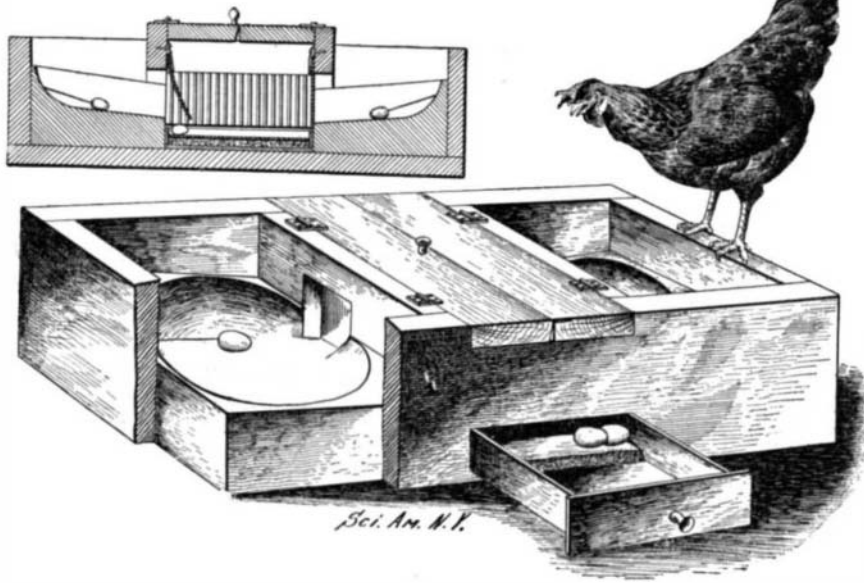
CANE AND WHIP COMBINED.

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



AN ADJUSTABLE AND FOLDABLE RAKE.

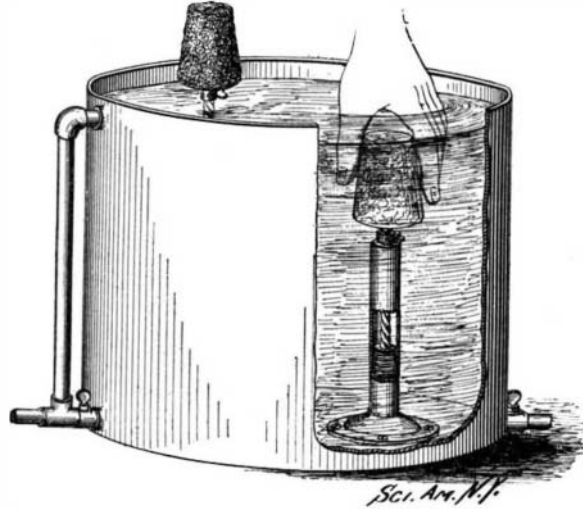
amount of room in a barn. A Kentuckian has sought to overcome this inconvenience in a most ingenious way. He mounts the teeth of his rake on links pivoted together after the manner of lazytongs, and connects



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.

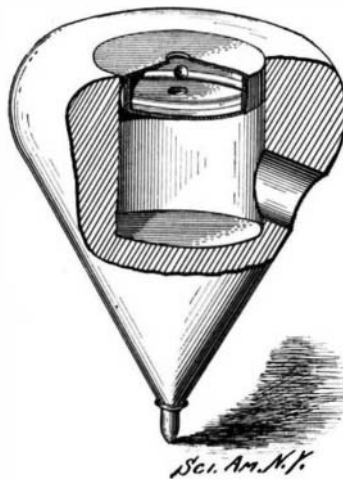
A **MECHANICAL TUMBLER-CLEANER.**—An apparatus for cleaning tumblers which springs from the inventive brain of a Western inventor, will probably be of interest to the hotel and restaurant keeper. Brush-bearing spiral spindles are provided with piston-heads arranged to reciprocate in a cylinder. A coiled 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.

A **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.

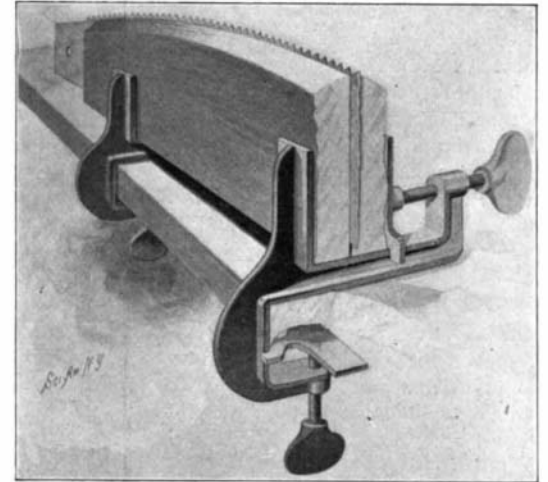
An **EGG-COLLECTING NEST.**—The nest illustrated is intended automatically to collect eggs which have been laid, in order to prevent a hen from eating them. The nest is divided into three compartments—a central storage chamber and two egg-laying compartments at the side of the storage chamber. The egg-laying 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.