

WATCH THE NUMBERS

Never Device Shows Plainly Speed of Motorist
Speed Indicators for automobiles have been invented without number



During the past few years, but the newest kind is a speedometer that not only shows the speed to the driver of the machine, but to the people on the street, as well. A portion of the windshield on the machine is ruled off into squares, and each square marked with a figure, indicating the number of miles per hour. Each square is a compartment and is equipped with an electric light. Under the hand-needle of an especially prepared speedometer, electrical contacts are placed, connecting with the various figures. As the car gathers speed, the needle moves around the face of the speedometer over the contacts which cause the lights to flash. The device has been patented and is said to give good service, as it settles all controversy as to speed, since the only figure that is visible is the figure showing the actual speed of the car. The device is not believed to be very useful for work in daylight, but it will work satisfactorily at night.

A QUICK TRIP

After the racing season closed at New Orleans one season a colored roustabout asked where the next meeting was to be held. He was told "Toronto." "Is it far?" "Just a short distance," was the reply, so he jumped in a boat and started to row there. When about four miles from New Orleans an acquaintance on the bank hailed him with: "Hello, Link, ole boy!" Link started for the shore, musing to himself: "Ah wondah who knows me in Toronto?"



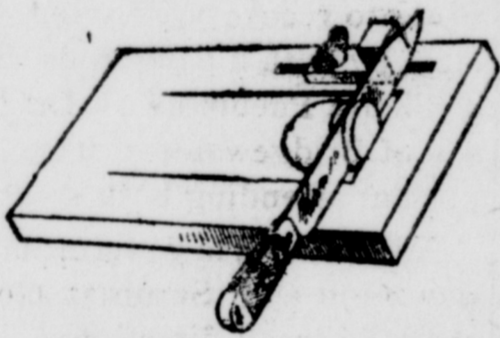
A Serbian Woman

The peasant costume of the Serbs is most picturesque, the feature of it being a fringed apron of gaudy colors and beautiful finish. The women are usually healthy and powerful and in many cases beautiful.

WHAT DO YOU KNOW?

Water rolls off cabbage leaves because they are covered with a very fine dust. Dark clothes are the warmest because they attract more heat from the sun. Dusty shoes are always the hottest because polished shoes throw off the heat. A negro has black eyes because that color defends them from the strong sunlight. The bubbles in a teacup follow the spoon because it attracts them just as a magnet attracts steel. It is in the lungs that our blood becomes red. Before it gets there it is of a dark purple color. Plants grow quicker on bright moonlight nights because such nights produce dew, which is very good for plants. A kettle "sings" because the air in the water escapes by fits and starts, and so makes the "singing" noise. Animals are covered with fur, hair, and feathers because those substances prevent the heat of the body from escaping. Hawks can see such a long way because they have a special eye muscle by which they can alter their sight to long distances. A black man's skin does not scorch or blister with the hot sun because black absorbs the heat and takes it beneath the skin. Trees and flowers make the country healthy because they feed on the bad carbonic gas in the air and return the good oxygen to it.

Slicing Board For Kitchen



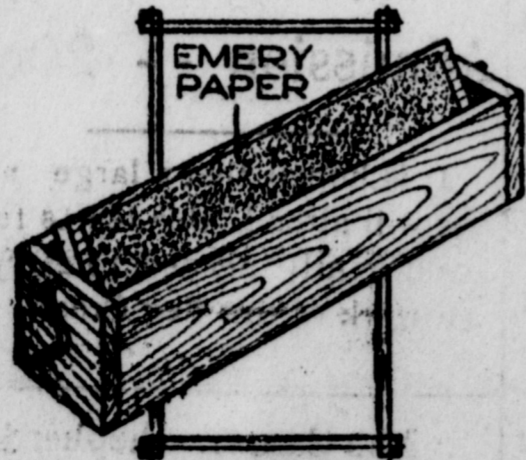
The board illustrated was suggested by a device used by a "sandwich man," and proved practical for use in the home and especially in the camp. Potatoes, or other articles of food to be sliced, are placed in the hollow portion of the board and moved against the edge at the right, under the knife. The guide, which may be adjusted by means of the wing nut, permits slices of varying thickness to be cut.—Popular Mechanics.

HUGE RAILWAY SHOPS

Efficiency in Repair Work Sought by Canadian Roads

The principal car repair plant of the Grand Trunk Railway for the lines west of the St. Clair River at Port Huron for many years, was destroyed by fire during the winter of 1914-1915. Their old plant was of limited capacity and located at what was the old terminus of the line previous to the construction of the tunnel under the St. Clair River. After the fire negotiations were carried on between the town of Port Huron and the railroad, resulting in the acquisition of the property vacated by the Port Huron Thresher Company, which property was very much more advantageously situated, being near the tunnel line. The plant was first planned to consist of a power house containing 6 150 h.p. boilers serving double turbo-steam generating units of 200 k.w. for developing the electric power for lighting and operation of machines, all motor driven; a passenger car shop accommodating 27 modern passenger cars; a freight car shop accommodating 70 freight cars; and other buildings. These buildings, including trackage, were to take a space of approximately 55 acres; arranged for economical operation, special attention having been given to this feature to ensure maximum efficiency. The total cost was estimated at \$700,000.

Cleanly Pencil Sharpener



Pencils may be pointed without spreading the dust from them by the use of the device shown in the illustration. A piece of emery paper is fixed to one side of the cover of the box. By turning over the cover with a handle, after a pencil has been pointed, the dust may be dropped into the box and removed from time to time.—Popular Mechanics.

ICONS ARE RUSSIA'S DEVOTIONAL TABLETS

There is not a home in Russia that does not possess its icon, the devotional tablet in the mystic power of which every Russian believes. These icons vary in size, quality, and decoration, many of them being of great value and antiquity. There is an interesting collection of them at the Victoria and Albert Museum. The word "icon" is really the Latinized form of a Greek word signifying portrait. The portrait may be small enough to carry in the pocket, or it may be life size, and the icons in the Russo-Greek churches are often of wonderful workmanship and costly design. The raised halos of the portrait figures are specially enriched with precious stones and in the case of the portraits of the Virgin the robes are encrusted with seed pearls and the fingers and neck adorned with jewels. Some icons take the shape of a square or oblong box, set in metal thickly enamelled and hinged, which, when open, reveal figures of religious interest. Some curious examples of icons of finely carved horn are also to be found, the effect being most beautiful when hung in a position which admits of the light being seen through the carving. A small but exceedingly fine specimen of the horn icon is minutely carved with a series of episodes in connection with the birth of Christ. Its mounting is of silver-gilt, chased in a cord pattern, and the whole hangs from a suspensory bead. One may also come across the icon of carved boxwood, fitted for the sake of the protection of its fragile beauty into a case of precious metal, enamelled and studded with precious stones.

KING AS HERB GROWER

New Industry to Replace German Supply

"Will the Government protect belladonna growers by a tariff?" was one of the inquiries at a conference of medicinal herb growers in the Carlton Hotel, London. They had met to discuss the organization of various societies for producing home-grown herbs to replace supplies formerly received from Germany and Austria. The inquirer explained that 6 pounds of fresh belladonna leaves produce only 1 pound of dried leaves, and for this 50c is offered. "It's impossible to produce them profitably at that price," he said. "I have got 7 pounds of foxglove leaves and 3 pounds of dandelion roots." What good was that to a man who had orders by the ton, asked Mr. Latimer, whose point was that it was a huge industry. Sir Sydney Olivier, Permanent Secretary of the Board of Agriculture, intimated that if any reliable organization was founded with prospects of supplying medicinal herbs in remarkable quantities the Development Commission would doubtless give favorable consideration to the question of a grant. "Both the King and Queen have taken the greatest personal interest in the movement," stated Mr. H. C. Cust, the chairman of the Central Committee for National Patriotic Organizations, who presided. At their Majesties' request there had been a consultation with the head gardener as to what could be done in growing the herbs in the royal gardens, and he (Mr. Cust) had since received a letter from the Queen's secretary stating that the matter was being proceeded with. Many owners of large gardens had started to grow medicinal herbs, some putting down 15 to 20 acres.

Aged Speakers

Although the Speaker's office is an exhausting one, all its holders of recent years have lived to a hale old age. Lord Selby, Lord Ossington, and Lord Hampden were well over seventy when they died, and Lord Peel lived to eighty-three. Lord Eversley, who filled the chair for thirteen years, attained the age of ninety-four, and was so keen on outdoor pursuits to the last that he bought a new pair of guns when he was ninety-two. Speaker Shaw-Lefevre found his experience as a shot useful in the House. Someone asked him once how he contrived to single out his man when twenty members sprang to their feet at once. "Well," he replied, "I have not been out shooting rabbits all my life for nothing, and I have learned to mark the right one."

Breeding for Quantity

To have a 200-egg strain it would be necessary to make that mark the average. That would mean not a few eggs in the flock to lay from 200 to 300 eggs per year. Such hens, for breeding purposes, would be physical freaks.

In all buildings in Cologne except separate residences of not more than two stories concrete or iron stairways are required by law.

BOY'S HEART MASSAGED

Action Restored After Thirteen Minutes' Suspension

The story of how Albert Davies, aged 6, had his heart's action restored by massage after thirteen minutes' cessation is related in the privately circulated "Gazette" issued to the staff of Guy's Hospital, London, Eng. After the boy's tonsils had been removed he stopped breathing. Other means failing to restore respiration, which had ceased for twelve minutes' an incision was made to enable the surgeon to massage the heart. After about twenty squeezes the heart was suddenly felt to be beating and respiration was re-established, though at first the pulse was not perceptible, and the boy's condition remained extremely feeble. He was unconscious for two days. Only by unremitting care was he brought round gradually to perfect health. The medical statement on the case concludes: "There have been several successful cases recorded of heart massage, but this case is perhaps unique, in that recovery took place after so long a time of cessation of the circulation. It can be imagined that it is extremely difficult to estimate time in emergencies, but it is certain that the heart had stopped at least thirteen minutes, and the impression of those present was that this figure should be between fifteen and twenty minutes."

PROTECT MIGRATORY BIRDS

At the North American Conservation Conference, held in Washington, in 1909, and attended by representatives of Canada, Newfoundland, United States and Mexico, the international problems presented by the proper protection of natural resources were clearly recognized. With regard to migratory wild life the necessity for co-operative action is especially obvious. In Canada and the United States the protection of this invaluable resource is vested in the individual provinces and states, respectively. Protective laws were extremely diverse in both character and efficiency, with the result that the beneficial effects of adequate protection in one portion of the continent were largely nullified by the lack of similar measures in other sections. To secure stricter and more uniform protection negotiations between Canada and the United States were undertaken. The arrangement was satisfactorily concluded, the later ratification by the United States Senate constituting the final step. The treaty does not affect the administration of the provincial game laws, but insures in Canada, as in the United States, the minimum of protection regarded as essential to the permanent preservation of the wild life resources of North America.

SUPERSTITION IN JAPAN

Missionaries Have Had a Fight Against Popular Beliefs

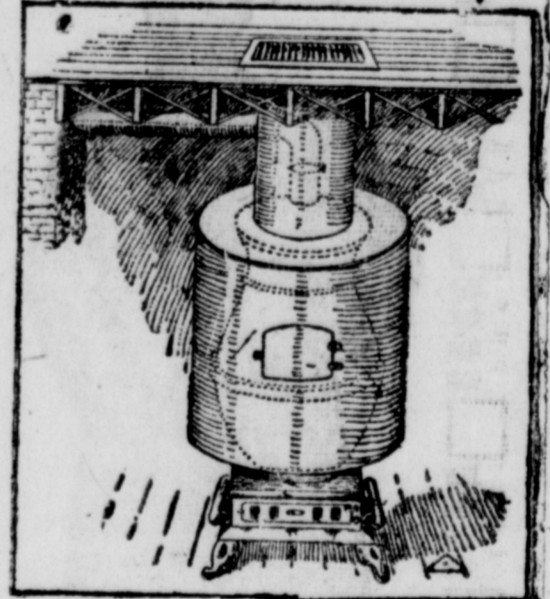
An European writes: "Japan is popularly supposed to have one religion, Buddhism, and one quasi-religion, Shintoism, usually understood to be upheld by the authorities as a stimulus to patriotic thinking. But as a matter of fact there are nearly thirty different sects in the two religions. It is not heathen religions, however, which have to be fought, but the superstitions which cluster round them. Worship of a deplorable kind is practised in connection with many Shinto shrines. The tourist passes a Fox shrine by the wayside, and is impressed by its picturesqueness and sees little in it except a reason for a smile. There are Japanese at this day who keep serpents in cages and call them Odotsusama, 'honorable lord brazen serpent,' bowing before them in supplication. When we hobnob with the principal of the village school and he, with a cynical smile, says that the people are very ignorant, we should remember that in almost every village there are one or two soothsaying women called 'Miko' who are consulted by otherwise intelligent men on every important step in business, and who have often more power than any priest or official over the actual lives of members of the community, acting not only with regard to the affairs of the living but rendering service as mediums between the living and the spirits of the departed, settling questions of property, marriage and divorce."

It should be the aim of every poultryer to improve the egg qualities of his flocks. He should take good aim. But in his endeavor to improve he should not make too rapid a pace. Trap nests help to pick out the dross, and enable us to give better attention to the workers. Russia is estimated to have more than 4,000,000 acres of land which would produce cotton if irrigated. Kava apparatus has been invented for killing the tiny parasites that eat small holes in leaf tobacco.

HOMEMADE FURNACE

Constructed From an Old Stove and a Galvanized Tank

This furnace was constructed from an ordinary pot stove and an old galvanized oil tank turned upside down over the stove. Holes were cut in the bottom of the tank for the stove at the hot air pipe. The tank was supported about one foot from the floor.



OLD STOVE IN TANK.

so as to let the cold air in from the cellar to take the place of the hot air as it passed through the air pipe into the room above. A hole was cut in the side of the tank opposite the stove door and another door attached to provide an opening for feeding fuel into the stove. The stove was made to heat a store and was used with entire satisfaction. Very little coal was used during the winter, and plenty of heat was produced at all times.

SHORTHAND WRITING.

"Stenography" Not the Only Name by Which It is Known.

Shorthand writing is known by other names than "stenography." "Tachygraphy" is only one of them. Its second part, of course, comes from the same root as the latter end of "stenography"—that is, from the Greek "grapho" meaning to write. "Tachy" is derived from the Greek "tachys" meaning swift, so only the shorthand writer who has the ability to take down rapid speech and transcribe it quickly has the right to call herself or himself a "tachygrapher." (The "ch" sound is like that of "k.")

"Stenography" comes from "grapho" combined with "steno," which means "narrow" in Greek. So a "stenographer" is either a narrow writer or one who practices "narrow writing."

Not so many years ago we heard a good deal about "phonography" as a name for shorthand writing, but the term seems to have gone out of use. It comes from that same useful root "grapho," combined with "phono." The latter word means "sound," so that a phonographer is one who writes down sound as he hears it. The phonograph is, of course, an instrument for writing or recording sound.

Then there are "brachygraphy" "steganography" and "logography" as other names for what we generally call stenography. In the order given they are derived from "grapho" combined with "brachys," meaning "short"; "steganos" meaning "covered," "secret" (a stenographer is one who writes in cryptic or mysterious writing, not to be read by the uninitiated) and "logos," meaning "speech."—New York Times.

UTILIZING WASTE COAL.

Worthless Slack Burned With Ease in Patent Furnace.

An illustration of the feasibility of using waste coal for power purposes has just been given here, one of the new patent water tube boilers having been installed in an oil mill in this city, reports Consul Hamm of Hull, England. The success of a public exhibition given shows, it is claimed, that much coal which has heretofore been rejected as worthless can be used and that greater efficiency can be obtained from this waste coal by the new method than from the best coal by the old method. The system employs the known principle that almost perfect combustion can be obtained by mixing air in proper quantities with pulverized coal before the latter is introduced into a furnace. This insures better combustion with less air than usual and with consequent increase of boiler efficiency by reducing the amount of heat carried away by the escaping gases. The results obtained with the poorest kind of fuel are claimed to be as follows:

The most total elimination of losses, as the fuel is burned in suspension, the amount of unconsumed coal in the furnace at any given time being infinitesimal.