

Topics of the Times

Japan wants to awaken China. This job is likely to require a good deal of early calling.

A Tacoma bootblack has just retired with a fortune of \$20,000, proving the wisdom of beginning at the foot.

The French doctor who says jaundice is a disease makes no claim that people who have once had it become immune.

The report is in circulation that King Alfonso eats nine meals a day. He doesn't look it. Where does he stow them?

Man may want but little here below, as the poet once sang; still he likes to keep the coal pile just a little bit larger than the ash heap.

The New York restaurant keeper who allows a woman of the snake has perhaps discovered the only way to cure them of the desire to eat.

Prophets are again busy predicting the early end of the world. It is about time that medical scientists discover a germ for that sort of ailment.

The skyscraper destroyed by fire in New York was thirteen stories high. What an opening for people who believe in the hoodoo combination!

Ten thousand Chinese have routed the government troops, killed a general and sacked a town. The cables announce that "the unrest is increasing." Evidently.

Four children were recently born to the wife of a man of the name of Lark at Roanoke, Va. The President will be likely after this to think there is a good deal in a name.

The members of a Chicago widows' club have resolved not to propose during leap year. But won't members who receive proposals be suspected of violating the agreement?

Admiral Dewey does not share the pessimistic opinions concerning our navy. He found on a certain well-remembered occasion that it was all it was cracked up to be.

In Wilkesbarre a brass band is using the upper floor of the lock-up for rehearsal purposes. No better way could be devised for teaching prisoners that the way of the transgressor is hard.

To be silly is the latest fad of London women, according to one of the English periodicals. We are wondering whether it requires much practice on the part of the ladies to become authoritative exponents of the fad.

Because she found only 30 cents in his pockets an Indiana woman accused her husband of supporting another lady, whereupon he applied for a divorce. Why will women who are reasonably happy continue to hunt for trouble?

Tolstoy's poetic imagination makes him an inspiring prophet even to those who disagree with his opinions. In a recent message to the contentious world, in whose combats he sees no light, he compared the struggling parties to the panic-stricken prisoners in a house from which they are trying to escape. They fight to force the door open, and only seal it more hopelessly, for it opens inward, as the doors of the soul must open to the light.

Bee stings, mustard packs and other unscientific remedies for rheumatism will have to take second place in the matter of oddity, to a cure discovered in Australia. A whale, stranded on the beach at a health resort, had been cut open, and a frankish invalid plunged into the mass of blubber, remained here two hours, and found himself free from rheumatism when he crawled out. The incident seems to be touched for, and although the prescription is more novel than enticing, there are probably many sufferers who would like to catch a whale and try it.

One of the most unhappy, but at the same time impressive, sights ever witnessed at the headquarters of the New York police department took place there recently, when a patrolman was discharged from the service because of swindling. In the presence of his brother officers his badge was unpinched from his breast and the buttons cut from his uniform. No such thing had happened before for more than thirty years. It is a curious trait in human nature that physical courage, the virtue which is most cherished and most extolled, should be at the same time perhaps the commonest. The great popularity of the soldier and the military hero is due almost entirely to the fact that originally it was the soldier especially who was obliged to exercise physical courage. It is not improbable that the lessening tendency to make heroes of soldiers merely because they are soldiers is due to a growing perception that many other occupations call for and produce men who do quite as daring deeds in circumstances far less favorable to gallantry. It would be an exceedingly interesting thing if one could trace the influence of newspapers and other periodicals on the prevalence of physical courage. There can be no doubt that the influence is considerable. Nothing is seized more eagerly by the reporters than stories of "heroism," and not much is read with greater interest by the people. In days, then, when every man is a hero who stops a runaway horse or pulls a little boy out of a brook, it must be that the popular imagination is very considerably stimulated and the mind stirred to emulation by the newspaper reports.

In an address before the City Club of Chicago Dr. Devine, the able editor of *Charities*, the model periodical in its field, discussed the other day the inadequacy and backwardness of many of

the existing relief organizations. Our conception of charity has broadened remarkably in the last decade, and some organizations are abreast of these developments, but others are still doing their well-meant work in ways that experience has discredited. Dr. Devine holds that prevention and rehabilitation are as much the duties of charitable organizations as attention to actual distress. The two great causes of pauperism, he says, are congestion and overwork, and modern relief agencies should grapple with these problems and similar ones in addition to supplying soup and coffee and bread. In this connection it is interesting to refer to a discussion in the columns of a New York newspaper of the cost of organized charity. A correspondent had examined the latest report of the Charity Organization Society of that city and found, to his surprise and indignation, that it had cost \$196,000 to distribute about \$60,000. He concluded that charity was "over-organized" and that machinery and administration cost a good deal more than they should. But the president of the society and other workers have shown that the complaint of criticism was based on the old-fashioned notion that the distribution of food, money and clothing is the only kind of service which charity societies are organized to render to the poor. As a matter of fact, the modern charity workers substitute better and different services, such as the obtaining of employment, the prevention of tuberculosis, the maintenance of a school for the study of philanthropy, the inspection of tenements and the urging of legislative reforms designed to diminish misery and destitution. All such functions entail heavy expenditures, but they come under the new view of "service," and it is unfair to regard them as administrative merely. The cost of administration in the old and strict sense was only \$4,423 last year, not \$196,000. Every charity conference, every issue of *Charities*, emphasizes the modernized and rationalized view of relief and philanthropy. But there is much to do in the way of harmonizing theory with practice.

SECRETS OF THE UPPER AIR.

Ballooning Leads to Discoveries on Physical Conditions. The growth of ballooning has led to many curious investigations touching the atmosphere and its inhabitants. By the use of anchored balloons with self-registering instruments some of the experiments of deep-sea sounding have been repeated aloft. At Strasburg sounding balloons have been sent to a height of nearly 20,000 yards, and 10,000 to 20,000 yards is not an uncommon height. One of the astonishing results in the discovery at a height of 14,000 yards of an isothermal zone in which, contrary to experience up to that height, temperature does not diminish with recession from earth.

One of the most interesting studies is that of the flight of birds. The observation of aeroplanes appears completely to dispel the old-time notions that some birds soared to stupendous heights, Humboldt having credited the condor with over 7,000 yards and others believing that birds of passage flew at heights of 3,000 to 5,000 yards, and in exceptional cases 10,000 to 12,000 yards. Balloon voyaging, however, establishes the fact that birds never rise to anything like these distances above the earth. Prof. J. P. Paschel, of Frankfurt, records as altogether unusual the passage of a balloon in which he will through a flock of birds at night at a height of 2,200 yards. The birds dashed against the basket of the balloon and generally they acted as if they had lost their bearings.

Bird flight at the great elevations formerly assumed is now regarded as physically impossible. The rarefaction of the air is too great to permit of flight without terrible exhaustion, especially as breathing would be difficult. Besides, the cold is too extreme at a height of 10,000 yards, for instance, the thermometer dropping to 60 degrees below.

The observations of balloonists show that the vast majority of birds, and within 1,000 yards of the earth, and the vast majority of these, indeed, within a couple of hundred yards, even in long flights. Crows, however, were frequently observed at a height of 1,400 yards, a hawk was once encountered at 1,900 yards, and an eagle is on record at 3,000 yards.—Washington Post.

DISCOVERY OF COAL.

Mentioned by a Jesuit in 1479 and Mined at First in 1749. So far as known the first mention of the occurrence of coal in the United States is contained in the *Journal of Father Hennepin*, a Jesuit missionary, who in 1679 recorded a "cole mine" on Illinois river near the present city of Ottawa, Ill.

Coal was first mined in the Richmond Virginia, about seventy years after Father Hennepin's discovery in Illinois, but the first records of production from the Virginia mines were for the year 1822, when, according to one authority, 54,000 tons were mined. Ohio probably ranks second in priority of production, as coal was discovered there in 1755, but the records of production date back only to 1838. The mining of anthracite in Pennsylvania began about 1790, and it is said that fifty-five tons were shipped to Columbia, Pa., in 1807. Reports of the anthracite coal trade are usually begun with the year 1829, when 345 tons, one for each day of the year, were shipped to Philadelphia from the Lehigh region. Before this, however, in 1814, a shipment of twenty-two tons was made from Carbondale, also to Philadelphia. It is probable that the actual production prior to 1829 was between 2,500 and 3,000 tons.—Washington Star.

The Philosopher's Father. He is probable that the actual production prior to 1829 was between 2,500 and 3,000 tons.—Washington Star. "Your girls have been blessings," said the officiating clergyman after the double ceremony. "Yes," the old man huskily asserted, "they are the sort of blessings that brighten as they take their flight."—Cleveland Plain Dealer.



FARM AND GARDEN.

Putting Up Silage. Many people make the mistake of cutting corn too green for silage. Writes Dr. G. A. Billings in *American Agriculturist*. At this stage there is a larger percentage of water, and the silage when taken out has a large amount of acid, less starch and sugar and hence is less nutritious. Corn planted in drills with stalks eight to ten inches apart will mature a good proportion of ears.

Harvesting should not begin until the ears are passing the roasting stage and begin to glaze. Unless the season is exceptionally dry the stalks and leaves will remain green, but too mature or dry corn is more liable to mold. This may be found in spots around the sides or more generally over the silage wherever the air has gained access to cause the fungous growth. This condition may be improved by tramping the material carefully in the silo, adding water by sprinkling with a hose, or if this is not available direct a stream of water into the blower or elevator sufficient to saturate the cut fodder. This moisture assists the material to settle and acts as a seal to keep out the air.

There should be labor and teams enough to keep the cutter running steadily. Nothing is gained by cutting a large amount of corn beforehand, hauling and piling near the machine is exceptionally dry the stalks and leaves will remain green, but too mature or dry corn is more liable to mold. This may be found in spots around the sides or more generally over the silage wherever the air has gained access to cause the fungous growth. This condition may be improved by tramping the material carefully in the silo, adding water by sprinkling with a hose, or if this is not available direct a stream of water into the blower or elevator sufficient to saturate the cut fodder. This moisture assists the material to settle and acts as a seal to keep out the air.

Power should be ample and in proportion to the size of the cutter. The blower is replacing the elevator machine, economizing space and largely doing away with the stopping of an entire crew to repair the elevator. If the corn is heavy and the stalk large, cutting in half inch to one inch pieces will have the tendency to partially shred the stalk, and there will be no butts refused by the animals. The material in the silo should be kept level and well tramped, especially around the sides of the silo, and it pays to have sufficient help for this work. Where considerable silage is put up it pays to have a corn harvest-



FILLING THE SILO.

er or binder, which economizes hand labor. The accompanying illustration shows part of the outfit used at the New Jersey experiment station in filling the silo for fall and winter feed. The source of power for running the cutter and blower is a gasoline engine.

Avoiding Wastes. The first great lesson to be learned is to avoid waste. Waste has been the curse of agriculture. Why pay taxes on land that is not farmed? Why only half cultivate the fields and so waste both land and labor? Why waste time and capital in raising inferior animals? Why waste money in buying what should be raised on the farm? Why waste energy in trying to do more than any one man can do right? On many farms there is waste in a thousand ways, and no wonder that to some "farming does not pay." The small details must be looked after, and no farm should be larger than what can be properly attended to.

Best Grafting Wax. The following is claimed to be the best grafting wax, by an old orchardist who says he has tried a great many: To four pounds of rosin and one of beeswax add one pint of linsed oil; put in an iron pot, heat slowly and mix; pour into cold water and pull until it assumes a light color. Work into sticks, and put into a cool place until wanted. Some prefer linsed oil to animal fat for grafting wax.

Manure for the Garden. Let the barnyard manure for the garden be well rotted if it is desired to cultivate it into the soil early in the spring; but if, on the other hand, manure is to be used, scatter broadcast during the winter, and rake up or much part of it before plants are set in spring. Of course, this applies to ground that has been plowed the past fall.

Fertilizers for Strawberries. Regarding the effect of different fertilizers on strawberries, land plaster when applied to the bed is said to make the berries more brilliant, though lighter in color. Nitrate of soda largely increases the size of the leaves and berries, but the berries are said not to be so firm. Sulphate of potash improves the size and flavor of the berries, and also the color and firmness, while superphosphate increases the yield. The kind of soil, however, is to be considered, as well as the variety of strawberry.

Bran for Poultry.

"Bran is an excellent food for poultry in all stages of growth as well for laying hens. One great point in its favor is its cheapness. It contains a larger proportion of lime than any other food at the price, and lime is essential to growth of bone, muscles and feathers, as well as the formation of shells for eggs. Lime which is found in food for some reason is much more easily assimilated than in the form of oyster shell and the like. Wheat is a most excellent poultry food, but the high price prohibits many from using it freely. Bran and clover used in connection with oats will produce a good result. Clover and alfalfa are rich in lime and should be had at all times in the green state when possible and in the form of well-cured hay the rest of the year. Cut alfalfa and bran may be fed in the form of a mash. Skim milk is an ideal thing to moisten it with. Food, however, will consume quantities of bran dry fed from a self-feeder and they eat alfalfa or clover hay freely from the stack or manger.

"Bran may be used mixed with the cut grain in the self-feeder and perhaps this is the most convenient form of all in which to use it. "Some of the most valuable food properties contained in the wheat are left in the bran and its food value for poultry is not fully appreciated by many poultry raisers or we would see more of them using it in the ration. If you feed bran, clover and alfalfa you need not oyster shell and very little cut bone or lean meat. In fact a flock will get on and yield lots of eggs with no attempt to furnish meat if the bran and alfalfa is fed."—Poultry Topics.

Overshoe for Horses. Horses undoubtedly require an over shoe when the ground is snowy and coated with ice as much so as the horse's hoofs. A human being, however, is not so anxious to protect his feet from injury by falling as a horse. Drivers, although anxious to protect their horses from injury by falling, have been unable to procure practical and satisfactory overshoes. Those made of rubber prevent the horse from slipping, but they wear out so quickly their cost is prohibitive. In the illustration is shown one which seems well fitted to serve the purpose. It is made along similar lines to the "gripper" chain placed on automobile tires. The tread is formed of a number of metallic links. When the over shoe is adjusted on the foot the links intervene between the hoof and the ground, affording a firm grip. This over shoe need not necessarily be worn on the horse all the time, but in case of sudden freeze can be quickly adjusted in position and removed when desired.

Result of Corn Breeding. From numerous experiments made in Wisconsin there has been developed a strain of white dent corn which grows on a very short, thick-set stalk, and which matures a good-sized ear, and the ears run remarkably uniform. The growth centers in the ear rather than in producing a big stalk at the expense of a small ear. After four years of careful, persistent work, there are numerous corn fields in Southern and Central Wisconsin which will yield 90 to 80 bushels per acre, and 100 bushels have been reported several times. Such results coming from a State which a few years ago was considered what corn breeding will accomplish when carried on along sensible lines.

Clover and Fodder. Clover and corn furnish a fodder ration that can not easily be improved upon for dairy cows. Two factors should be taken into account when determining the amount of grain to feed. One is the extent to which clover or alfalfa is fed, and the second is the production of the cow. The rule with some is to feed one pound of grain for every three pounds of milk produced. When clover or alfalfa form a large part of the ration it would seem reasonable to suppose that a less quantity of grain would suffice than the amount named.

Cheap Fertilizing. Some of the best farms in the Ea. have been brought to the highest degree of fertility by the use of clover, lime and manure. The farmers who have accomplished such results have aimed to save every pound of manure, and also to preserve it in the best manner. Lime is used extensively by those who know that lime is an essential ingredient of plants, and also because it is excellent for increasing the clover crop. Clover enriches the land by promoting the supply of nitrogen in the soil, hence lime and clover make an excellent combination.

Wire-Winding Machine. The frame of this wire-winding machine is constructed of 2x4 lumber, 6 feet by 2 feet 5 inches. Standards for holding shaft, 2 feet 10 inches. Shaft for holding wire spool, 3 feet 5 inches long with crank. For wheels, swivel cast wheels will do.



MACHINE TO WIND WIRE.

Horse Completes Electric Circuit. A novel device by which a horse is made part of an electric circuit has been reported to the War Department by Lieut. A. C. Knowles of the One Hundred and Thirtieth Infantry, at Fort Leavenworth, where tests have been made for permitting communication between mounted operators. By placing a small piece of copper properly connected with the telegraph or telephone instrument against the animal's body, a ground connection is completed through the horse's feet, and the operator is enabled to transmit messages to his base without stopping his horse. Hudson (Wis.) unionists have organized a new machinists' union.

LEADING FIGURES IN THE THAW TRIAL.



HARRY K. THAW.

DEFENSELESS PACIFIC COAST.

One Cruiser on Foggy Night Could Destroy Seattle and Tacoma.

The departure of the fleet of sixteen battleships for its long cruise has at least served the purpose of drawing attention to the lamentably weak and unprotected condition of our Pacific coast, writes a Washington correspondent. From Lower California to the Canadian boundary we have absolutely no protection against invasion, save at San Francisco. Representative Humphrey, of the State of Washington, made it plain to President Roosevelt recently that a second-class cruiser on a foggy night could steam into Puget Sound and shell Seattle and Tacoma off the face of the earth without receiving a shot in reply. The President was so impressed that he asked Mr. Humphrey to prepare a report, in conjunction with his Pacific coast colleagues, as to what defenses and coast protection were necessary "and desirable."

San Diego and San Pedro in California are equally as unprotected as the Washington cities, and are wholly at the mercy of any enemy which may approach from the sea. It would not cost much, however, to give San Diego reasonable protection and to prepare there a rendezvous for a Pacific fleet. It is estimated that \$150,000 expended in developing out the approach would furnish San Diego with a splendid harbor, easily defended by land fortifications and by battleships, the latter of which would be instantly available for service anywhere along the coast. Just what the great Atlantic fleet will do when it reaches our Pacific coast is a question not definitely settled. Mexico has granted us permission to make use of Matatlan bay for target practice, but it is claimed by experts that the ships will be in no condition for anything except to go into drydock for a complete overhauling. For this the Pacific coast is absolutely unprepared. There is not a drydock or a navy yard commensurate for the task it would be called upon to meet. The Mare Island navy yard at San Francisco is absolutely inadequate.

There is doubt expressed by those who ought to know, having had experiences in the commissary end of the navy, that the provisioning of the fleet, when it arrived in the Pacific, may turn out to be as poorly prepared for as are the other functions. A Tread 1000 Years Old. Director Hornaday of the New York Zoological Park has placed upon exhibition a tooth which he believes to be not less than 1,000 years old, it having been found several months ago in a pocket of a block of limestone in a silver mine at Butte, Mont., 500 feet below the surface of the mountain. When found the tooth appeared to be dead, but upon instructions from the operator, who knew Mr. Hornaday, it was placed in a glass jar, sealed up and sent to New York. There an inspection revealed the truth that it moved slightly, although the eyes had long been useless and it had neither eaten nor drunk for centuries. This appears to prove the old theory that toads can live untold years in a state of suspended animation. The director believes that if he should try to feed the creature it would certainly die. It is quite plump and perfectly formed, medium-sized toad of the spadefoot variety.

The Eight-Hour League of America is conducting an agitation among the trades unions with the object of making the "universal eight-hour workday" the paramount issue of the coming presidential campaign. The United Hebrew Trades, an organization of about 120 Jewish trades unions in New York City, has a membership of some 75,000, most of whom are Socialists working in the clothing, fur and cap industries. Preliminary steps have been taken in Minneapolis, Minn., to induce all unions in the building trades to cast aside petty jealousies and join the building union council of that city. This is with a view to strengthening the central body. The Rhode Island Label League declares its intention publicly to fight the trusts by the use of the union label. The league will conduct its operations in that State and it is hoped to get every union throughout the State affiliated with the organization. Plans for the formation of local and district anti-child labor leagues throughout New York have been completed at Albany. A State League will also be formed. The recent convention of the New York State Workingmen's Federation at Syracuse adopted resolutions favoring the league and instructed the delegates to take the matter up with their locals and do what they could toward effective organization.

VAGARIES OF SEA CURRENTS.

Ocean Streams Are as Variable as the Winds of Heaven.

There are as many vagaries in the water as in the wind. Why, for instance, should three great ocean currents send their warm waters across the wide Pacific, Atlantic and across the Cape of Good Hope? Many theories have been advanced to solve the problem of their origin, but all have proved fallacious.

Other and equally mysterious currents exist in well-nigh all parts of the world. The tides are so erratic in different parts of the world that one hesitates to accept the theory that the moon controls them in all cases, says *Wisconsin Farmer*. It is on record that the sea has run for weeks out of the Java sea through the Straits of Sunda and thence back again for a like period without any perceptible rise or fall during those times.

Then there is the equatorial current that flows into the Caribbean sea; the overflying current to the eastward around Cape Horn; the cold stream flowing from the icy regions of the north past Newfoundland and Nova Scotia and along the American coast to the extreme end of Florida; the continual current running with a velocity of from four to five knots an hour through the straits of Gibraltar into the Mediterranean sea; the swift current running across the rocks and shoals of the end of Billiton island, which apparently starts from nowhere and ends somewhere in the vicinity of the same place, and the current which, starting half way up the China Sea, runs from two to three knots an hour to the north, and finally ends abruptly at the north end of Luzon.

Then we have those tidal vagaries known the world over as bores. Residents along the North Sea are familiar with them and can see them run from side to side in a zigzag shape until they reach their limit, often tearing the ships from anchorages. They originate nobody knows where or why.

The rush of waters in the Bay of Fundy is nothing but a huge bore sweeping all before it up to the head of the bay, until the western waters have risen to the height of fifty or sixty feet. Off Southampton, in England, there are the double tides, while at Singapore it has been observed for days at a time that there has been but one rise and fall in the twenty-four hours. The tides may be and very often appear as though they were "moonstruck," but they are certainly not controlled with hard and fast rules by that or any other body.

Booth Has Selected His Successor.

General William Booth, the head of the Salvation Army, recently announced at Blackburn, in Lancashire, England, that the same electric flash that carried the news of his death would publish the name of the new general for the army. It is learned that General Booth has left minute directions for the future administration of the army in a



GENERAL WILLIAM BOOTH.

sealed envelope with his soldiers. No one else knows who his successor will be, but it is believed that it will be Bramwell Booth, with Commissioner Howard and Commissioner Booth-Tucker as alternates in case of Bramwell Booth's death, and that the army will continue under the guidance of one man, and not of a committee or a board of directors.

Fog and Sound.

In a fog at sea the toll of a bell buoy is singularly grave and solemn, well matched by the weird note of a whistling buoy. Unfortunately the value of both is lessened in foggy weather from there being but little motion of the sea. Nothing, too, is more difficult than to distinguish in a fog the direction from which a sound comes. This is in part due doubtless to the interference offered to the straight course of the waves carrying the sound but also probably to the absence of the normal although unsuspected co-ordination of eye and ear in locating the origin of sound. The assistance of the eye on sea and land is instinctively given to the ear in many different ways. In a fog the ear has only itself to trust to.—London Spectator.

Occultism.

It is noteworthy that supernaturalism prevailed just as strongly at the other side of the globe among the aborigines of the new world. The coming of the Spaniards had been prophesied to the Mexicans by their oracles, and the prophecies were sung amid loud lamentations at their festivals.—London Outlook.

Not a Dog.

Old Lady (to chemist)—I want a box of canine pills. Chemist—What's the matter with the dog? Old Lady (indignantly)—I want you to understand, sir, that my husband is a gentleman. (In profound silence the chemist put upon some quinine pills).—London Queen.

The Hot Wind from the Desert.

"Khamis" is the hot wind from the desert which blows out of the Sahara upon Egypt. The word means fifty, from the idea that it lasts for fifty days. The "khamis" is a terribly hot and dry, and sometimes brings pestilence with it.