

Famine's Ravages

FROM time to time the feelings of the civilized world are harrowed with tales of famine and pestilence prevailing in India. Every few years the rain falls in Central India, and death stalks through a territory one-fifth the area of the United States and, from a population 25 per cent. greater, reaps a harvest of millions. Famine, with its train of diseases, is once again threatening an area in the heart of England's great dependency equal to that of all the New England States, New York, New Jersey, Pennsylvania, Delaware, Maryland, the District of Columbia, Virginia, West Virginia, the Carolinas, Georgia, Florida, Ohio, Indiana and Illinois combined, with a population two and one-half times greater than that of this section of the United States. This area has lain baking under a burnished sun until the heat rolls up from the dust-laden earth in waves, and the mind almost gives way under the strain of the monotonous round of rising sun, with its assurance of another day of ovenlike heat, and setting sun, with its pitiless promise of a repetition when it shall reappear in the course of a few hours.

"All human hope is now taken away that a dire famine can be averted," says Benjamin Aitken, who has wide experience with famine in India, writing in the current number of The Contemporary Review.

One of the most disheartening things in the world is to endeavor to give great gifts to people who do not appreciate them. Only far-seeing men, with great stores of optimism, can keep on trying to help persons who would rather not have what is best for them. Helping the Hindu when famine forces him forth from his barren home in search of food has its discouraging side, according to Mr. Aitken. Apparently there are times when he is more trying than a peevish, unreasoning child.

The Indian government is always on the alert for the symptoms of an approaching famine. Relief takes the form of public works, grain is shipped to the stricken districts by the train-load, and relief camps are provided for the distribution of food.

"As the season advances," Mr. Aitken says "and the famine grows more severe, it becomes necessary to open kitchens for the gratuitous distribution of food to the thousands of starving persons who are too weak to work. This would be unnecessary if the people had sense and could see that it was better to anticipate an emergency than to wait for it to overwhelm them. But rather than go away to a relief work as soon as it is opened, tens of thousands linger in idleness on their homesteads until they become paupers. They reduce their daily allowance of food and eke it out with leaves and seeds which they collect in the woods; they sell their implements of industry for a fraction of their value, and their axes and any vessels and cheap personal ornaments they possess, and also the doors and rafters of their huts; and many of them take to robbery.

"By nature and habit they are not steady workers. Therefore, many leave the works and wander about the country on the chance of subsisting on what they can pick up. They are only half clad, even according to the Indian standard, and many of them are scarcely clad at all. If they have children with them, they desert them one by one, leaving them to public charity if they enter a town and to jackals and wolves if they are in the country. They grow weaker from day to day, taking shorter walks and longer rests, till they sink down to rise no more."

"Now, as I write, I have the appalling prospect before me that, on the sole condition of my living, I shall see all this once more during next March, April and May. For nothing that love and money can do will prevent a million or more of people from perishing in this way.

"The extraordinary and continuous mortality of the pauper camp is attributable to two clearly defined causes. One of these is the perversity of the paupers themselves. European paupers are neither reasonable nor easily manageable, but they are as different as they can be from paupers here. Indian paupers look upon death as a less evil than discomfort and inconvenience. And discomfort does not mean to them being without clothes, lying on the ground, living on dry crusts or having nothing to do. It means having to make an exertion, being put out of their usual way, or being deprived of tobacco and spices. They are seldom happier than when they can sit for hours doing nothing. Strangest of all, they do not use violence, as a rule. A number of them may be famishing, with plenty of food lying exposed before them; yet one native peon suffices to keep the crowd off. In accordance with this indifference to life, they will leave the camp and wander away, seemingly out of mere restlessness, and turn up at another camp with a lying story, or come back to the camp they have left in such a state of emaciation that their death within a few days is certain. Energetic efforts were made in the Madras famine to detain the paupers by force, but in the last two famines only persuasion and threats were resorted to. However, people can laugh at threats who prefer death to restraint and starvation to inconvenience.

"The brutality of the perishing people is equal to their perversity. They do not know the feeling of gratitude, although they are profuse in expressions of it when they desire to allay suspicion. They practice deceit with amazing cunning and audacity. They are un-

affected by the sight of the highest gentlemen in the land wearing out their lives to save them, or by the sight of lakhs of rupees being lavished for their benefit, or by the sight of dozens of their own countrymen struggling with the impossible task of feeding them. They will not do a hand's turn to relieve these, or to help the hundreds who are famishing and sinking and dying around them. On the contrary, they do everything they can to promote the suffering of the sufferers and increase the cares of those who are helping them. They break or lose the dishes in which they get their food after every meal. They pollute the precious water supply. They tear down their sheds and use the materials for fuel. They insolently disobey the simplest sanitary rules with a flagrancy which cannot be described. If blankets or clothes be given to them, as is sometimes done by the thousand, they go off with them and sell them, live on the money for a day or two, starve for a day or two more, and then come back to the camp in a dying state. More than once—possibly more than a hundred times—a systematic trade in blankets has been found to be going on between the paupers and a dealer in the bazaar, who paid a trifle for the blankets as often as they were brought to him, and then sold them again at full price to the camp authorities. The camp servants connive at this trade, and sometimes one of them is himself the dealer.

"All this is not the worst that the paupers do. They rob the dying of food and blankets; they throw away food given to them if they see something better given to the sick. Mothers snatch away milk which is being given to their infants, or they take away all their children and give them to the jackals unless they are allowed to eat with them and share their special food."

Other instances of this callousness are recited by Mr. Aitken. On one occasion he was visiting a certain camp. "The mortality of adults at that camp," he writes, "was from thirty to forty daily, and I saw nineteen bodies burned on one pyre. We went into the hospital shed, where some two hundred men and women were living, nearly all of whom were to die within seven days. Swarms of flies were crawling over their faces. Some of the poor sufferers raised a hand now and then to drive off the flies, others could only move their heads uneasily, others again, with fixed eyes and open mouths, could do nothing; they were nearly dead. Two men whose duty it was to attend on the sick were absent. There were several servants idling about, but it would not have been etiquette to ask them to do other men's work. As for any of them, or any of the hundreds of idle paupers, volunteering to keep the flies from tormenting the patients, on their death beds, only a simpleton would imagine such a thing."

DIETING AND ELECTRICITY

IN the current issue of the Medical Times Dr. Samuel G. Tracy describes a method by which, he says, old age can be retarded. He uses electric currents to lessen blood pressure, thus modifying the results of arteriosclerosis, or hardening of the arteries, which is characteristic of advancing age.

Dr. Tracy says in part: "A celebrated French clinician claims that a man is as old as his arteries. In other words, beginning arteriosclerosis is the starting point of senescence irrespective of the number of years the patient may have lived. A man or a woman may be young in years, but old in his or her arteries, hence the importance of avoiding conditions and habits of life which are likely to produce a high blood pressure with hardening of the arteries.

"Senility is a natural process, and it should come on gradually and painlessly; however, owing to inheritance or predisposition, as well as the strenuous life we live in our struggle for existence, senescence creeps on us before we are aware of it. This is the time for the physician to exercise his functions and protect his patient before he is actually senile.

"When a man begins to get old much can be accomplished by proper medical advice and treatment to retard the symptoms which are an accompaniment of the inevitable decline in years.

"It is admitted by many of our profession that arteriosclerosis (with loss of elasticity in the walls of the arteries) is really the beginning of old age. The changes in the wall of the blood vessel are said to be due to hypertension and to vitiated blood. The condition of the blood is due to auto-infection, and the floating in the blood stream of waste materials.

Danger in Over-Eating

"The waste material found in the blood is due to over-eating, excessive drinking of alcohol, and auto-intoxication. In the latter case the chemistry of the system is unbalanced, there is faulty metabolism, and waste and repair do not take place equally. There is more waste than repair, and the organs which preside over elimination of waste material being overtaxed, are unable to efficiently take care of the excess, and consequently some waste material floats in the blood stream, acting as a poisonous substance, vitiating the 'rivers of life,' and degenerating the 'river beds.'"

"Degeneration in old age takes place by two methods, fatty degeneration and calcareous degeneration. Fatty degeneration is the increased production of unhealthy fat, due to

defective nutrition, and when the fatty degeneration affects the liver, kidneys or heart we have serious pathological conditions.

"Calcareous degeneration is an unnatural increase of lime deposit in the tissues. These products are often found as true incrustations. When calcareous degeneration takes place, in the walls of an artery the vessel becomes hardened, loses its elasticity, and its calibre becomes smaller. At this time the resting powers of the system are lessened and a long train of symptoms, particularly those pertaining to the circulatory system, are in evidence, and fatal results from apoplexy, heart or kidney diseases are likely to follow.

"When arterio-sclerosis has manifested itself by hypertension in the blood vessels, strong emotions, excessive mental excitement or physical strain is likely to endanger life by a sudden rupture of a small vessel in the brain.

"An artery of the body can be compared with a flexible rubber tube used for a drop light, and filled with illuminating gas. Continuous over-pressure of gas within the tube will affect the walls of the tube and diminish its elasticity. If the tube is slightly damaged or obstructed, increased pressure of gas may cause a fissure in the inner wall of the tube. To make the tube to do good practical work it is absolutely necessary to moderate the pressure of the gas. So it is with our arteries. When arteriosclerosis first makes its appearance we must reduce the pressure in the blood vessel.

"While old age cannot be prevented, we have agencies at our disposal which will materially assist in retarding it, and in making its symptoms more comfortable. These agencies are high frequency electric currents, diet and hygiene. The physiological effects of a high frequency current are due to the spark or condenser effect which produces mechanical effect on the tissue, an increased heat in the body, and the formation of ozone and ultra violet light. The local action is accomplished by a general reaction, the blood pressure is lowered, and combustion through the lungs is increased. The eliminative processes are generally stimulated.

Treatment by Electricity

"Formerly I obtained high frequency currents by the use of a transformer attached to a static machine, but recently I have been using the Hyfex coil.

"Treatment by the Hyfex coil: A senescent patient with arteriosclerosis may be placed in a solenoid and connected with the high frequency apparatus, or he may be placed on a condenser couch or chair. In the latter case he may lie or sit without removing his clothing, and be subjected to a bombardment of millions of oscillations per second. In from twenty to thirty minutes his blood pressure will be reduced from ten to fifteen millimeters, and his temperature raised one to one and one-third degrees. This seance may be repeated three or four times a week. While subjected to the electric action, the system is energized, the circulation of the blood equalized, the blood pressure is reduced, the general nutrition is improved, functional activity stimulated, the proper relationship between waste and repair is better sustained, and at the same time the elimination of poisonous products takes place more rapidly. After repeated applications nature assumes her normal functions, or as near normal as the case will permit, and performs her own work without the electrical stimulus.

"At this point I wish to say that I do not depend entirely upon high frequency currents in the treatment of arteriosclerosis or senility, for diet and hygiene play an important part. As one grows older he requires less food. An old man requires one-fifth less than an adult. In a general way most people eat too much, especially in our large cities, and they take too little exercise.

"As one writer on this subject has well said there are few of us who are muscularly and cerebrally well balanced. We live too much in the brain and too little in the body.

"The old man or woman should eat little at a time, often as necessary, and chew much. A large rich meal should never be taken, particularly in the evening, because under the influence of the digestion the circulation of the blood becomes more active and the blood pressure increases. Tea, coffee, and alcoholic beverages should not as a rule be taken; however, habit has much to do with this. My advice on the subject, generally speaking, where arteriosclerosis exists in the aged with the accompanying full pulse, distilled and fermented drinks should be given up entirely. However, in the old man of the opposite type, who has a weak pulse and is easily exhausted, wine, and even whiskey or brandy may be taken in small doses, preferably at meal time. I have no doubt in many cases of the aged with hardened arteries, that alcoholic beverages are responsible for attacks of apoplexy, angina pectoris, and acute bladder and kidney diseases.

"The old man with cold skin should have plenty of fresh air, but the surface of his body should be well protected with suitable clothing. He should wear light but warm clothing, with frequent massage of the body. For those who are approaching old age, or are actually senile, moderate but not violent exercise is very important."

The unusual event of a mayor marrying during his year of office occurred at Berkeley on Tuesday. The mayor was the mayor's housekeeper, and the sister of his wife, who died several years ago, leaving young children to be cared for. Councillor Edmondson is the first English mayor to take advantage of the Deceased Wife's Sister Act, and the first mayor of Berkeley, during the seven centuries of the mayorality's existence, to marry during his term of office.

The Grimsby Wallow Waits, who have this season earned 230 pounds sterling for the local hospital by carol singing, have since their formation twenty years ago handed 2,000 pounds sterling to the treasurer of that institution.

An Ocean Voyage

HE breeze caught the wail of the Dutch national anthem; two spruce officers, unconcernedly watching the agonized adieux of two women, tapped their feet to the rhythm of the anthem:

"Wie Neerlands Bloed,
Deur de aderen vloeit."

There was sorrow as well as excitement when the bugler blew the departure call; tears and the kisses that cling, sobs and intertwined fingers; then the wrench, the cries of farewell, the churn of the water. Majestically the Potsdam glided from Rotterdam on her ten days' pound to New York.

The fluttering handkerchiefs grew dimmer, the huddled faces of the five hundred steerage passengers panned like animals behind their barrier, forgot everything in the sensation of moving down the mighty Maas River. From the steps leading to the captain's bridge I peered at the minute but tempestuous life of the waterway—the darting tugs, the tacking luggers, the cargo boats, the strings of barges, all the varied Lilliputian panorama. The shores receded; we gazed lingeringly on green fields and tall trees; then the great river opened, the low-lying Hook of Holland, curving out like a beak against the sky, drew near, and in the fairway was a wreck, her poor masts starting up from the waves. Two hours had passed; we faced the open sea; another hour and we were out of sight of land, but yonder beyond the haze was England.

I went below; there was a scratching pen at every desk in the writing-room; for about midnight we should anchor outside Boulogne to embark more passengers. I was glad that we were drawing nearer to Boulogne, for already that eerie feeling of confinement, of the prison-house, of the impossibility of escape that, in a week's time, was to become at times almost unbearable, was beginning to trouble me. I envied the white birds that followed in the ship's wake, flying here, flying there—free.

We watched the sun, to which we steered, slipping down in a blaze of gold. One adventurous fishing smack we passed and just before nightfall a line of wild duck swept in a straight path across the sky, winging their way by unfathomable instinct to warmth. Then darkness, and all around in the unseen was the moan of the waves. Yet there was life out there; in the void—triangular lights of a passing vessel dipping and falling like balls of fire tossed up by the waves, and the giant revolving light on Cape Grisnez, sweeping round the darkness—regular, inevitable, cold as space. I went forward, heard the ship's bell strike the hour, and the voice of the sailor, cramped in the crow's-nest, high aloft, cry out, "Alls wel." Suddenly three of the crew rushed past me and stopped. A whistle blew; each man put a light to the Bengal candle he held, two white and one green, and for a minute the ship was ablaze with pantomime fire; then the whistle sounded again, the lights were dropped into the sea, and far away landward we saw the answering signal.

On we steamed through the blackness, and all I know of the mariner's compass and the stars could not persuade me that this moving mass, with its population of a thousand souls, its baths, its pianos, and its barber's shop, could find her way through the night to anchor off Boulogne. Perhaps she could not have done so unaided. I do not know. At any rate, two hours before midnight I saw a lantern swinging from the level of the water a quarter of a mile ahead; we slowed down; a rowboat nosed into sight; then a rope was thrown, and a bluff man clambered up the ship's side by a swinging rope ladder—the pilot. He walked silently and quickly aloft to the Captain's bridge. Then silence—I dozed, to be awakened at 11 o'clock by the stopping of the engines. We waited, watching the lights of a steamer rolling out from Boulogne. We saw the faces of our friends. They came aboard, cold and uncomfortable—they and their innumerable baggage. Just before midnight the "Potsdam" began to vibrate again, and the waves to lash out as her prow-cut the water. She settled to her work, gained speed, not to stop until nine days hence we steamed into New York Bay.

At 1 a.m. I went forward (my bunk did not invite me). Two bells sounded, and from above came those reassuring words, "Alls wel."

We are six days out. For ninety-six hours (it seems a month) we have had no sight of human things save the white birds following in our wake. The sun splashes the ocean with ever-shifting light; we follow the orb; it dips, then there is nothing but the menace of the night and the angry swirl of the waves illuminated by spots of phosphorescence. Oh, the tedious, bewildering nights! The most welcome sound is the bugle calling in the day; the most ominous is the recurring blast of the siren proclaiming that we are wrapped in fog and moving slowly through the danger.

The noises of the travail of the ship never ceases, they change only; and sometimes the groaning and the muttering is so clamorous that one wonders how she can bear the intolerable strain. We eat, dance, play, try to read and sleep, pursue our foolish avocations incessantly, and all the while through shine and fog and tempest, the vessel ploughs forward with one idea only—to reach her journey's end. High above, out of sight, are the officers on

watch, ever peering, ever alert; deep below, somewhere in the fever heat of the vast engine room, is the chief engineer. Our safety depends upon their skill and vigilance, but we have no fears. Trust has become a habit. Sometimes I ascend to the upper deck and peer down into the engine room. I cannot look long on account of the blasts of hot air that ascend, but long enough to shudder at the sight of that clean, orderly, polished, and vibrating hell.

But the wonder of these days of the week that have no name are the parallel wires stretched from mast to mast, with two slack wires dangle from them and piercing the roof of a cubby-house, rising like a white wart from the upper deck. There lives that magician—the Marconi operator. He fixes two drums to his ears and talks with unseen vessels. We awake in the morning to learn that we may converse with the steamship Minnehaha, steaming homeward, far below the horizon; we ascend from dinner to be told that communication is "now established" with Cape Race, 250 miles away; we stand above a sea that is peaceful as a pond, gazing out westward upon the sun, a luminous fire gem, sinking into a setting of violet haze, and are told that a companion vessel has just emerged from a hurricane with the loss of two boats.

At midnight, when eight bells has struck and the "Alls wel" of the watching sailor has followed the clang of the last note, I stumble along the upper deck to the circle of light gleaming from the Marconi cubby-house. I look within at the magician bidding the ether serve his will. The drums are upon his ears, an electric spark, two inches long, blazes and cracks before his eyes—he is talking with somebody, somewhere, out of sight, out of hearing.

I wonder what those eyes of heaven, the stars, in their eternal composure, think of man's latest victory!

Will land never come in sight? Upon the map it seems close, but the longing eyes meet only the waves. I go below, tired of the wind and the waste. Sudden shouts call me to the deck, and I see, not a hundred yards away, the Nantucket Lightship, warning seaway travelers of a deadly shoal. We wave to the exiles and they wave back. I watch the forlorn spot of life disappear, and once more the sun goes down upon a world of water.

That night I slept—or, rather, I awoke with the feeling that for the first time in ten days I had been really sleeping. There was no movement; the ship was still, and through the port-hole I saw the glimmer of shore lights. We had passed Sandy Hook in the night and were anchored in the inner bay.

All that followed is a blur of movement, spaces, skyscrapers, hoots and squeals of towering, top-heavy ferryboats and the great Hudson River washing the packed shores of Manhattan Island, upon which New York hustles skyward, tormenting the clear air by ceaseless jets of eddying steam. Trinity Church, that was once a landmark, is now dwarfed to insignificance.

Came the moment when I stepped ashore, startled to be reminded that the speech of this bewildering but familiar New World was my own, and yet not quite my own.—C. Lewis Hind, in the London Chronicle.

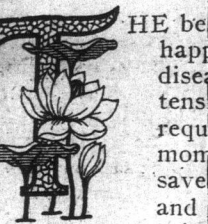
IMPROVEMENTS IN RAILWAY CARS

Engineering illustrates the great improvements in railway cars, taking India as an example, which is specially interesting because of the difficult conditions prevailing. Coaching-traffic receipts on the broad and narrow-gauge railways of India and Burma at present approximate £10,000,000 per annum, of which 74 per cent is contributed by the third-class passenger, the average third-class fare per unit-mile being 0.186d. Journeys, continues Engineering, vary from 1 to 1,500 miles, and through carriages frequently run 200,000 miles between periods of annual shop repairs. Temperatures range from 180 deg. Fahr. under the summer sun to 3 deg. of frost through winter snow. Humidity varies from 5 per cent in the Punjab to 92 per cent in Bengal. Sandstorms and torrential rains may be encountered on a single run. From 1854 until about 1900 four-wheeled vehicles were, except on frontier lines, the standard. From 1900 onwards increasing weight and speeds of trains necessitated the introduction of bogie stock now becoming general. Speaking broadly, adds Engineering, the dead-load hauled per seat has in sixty years increased from 0.18 to 0.247 ton, or 37 per cent, for four-wheeled, and to 0.31, or 72 per cent, for bogie vehicles, to which increase vacuum brakes, oil, gas and lavatory fittings, etc., have contributed approximately 12 per cent. The passenger-carrying capacity per foot length of train has, notwithstanding the floor area absorbed by lavatories, remained practically constant at 1.63; the gross load carried per axle has more than doubled. The area of the body cross-section has increased by 36 per cent, and the cubic feet of space per passenger by 62 per cent.

A pig, gaily bedecked with ribbons, formed the chief attraction at a wedding at Walton-on-Trent, where the local postmistress and saddler were married after thirty years' courtship. While on the way to the church the animal, which was a present, escaped among the wedding guests and was cheered through the streets by an excited crowd.

WITH THE

The Dangers of



HE be happy, diseased, require money, save and active course is promptly that appears in an epidemic will probably great danger of but will be thus averted is quite likely that practised without happens in the case tion, or pure bred s the pedigree layer record, plus possible one of the laying c is in its owner's opinion thus peremptorily happens to have con symptoms of liver c any of the many of which poultry flesh up, doctors it with times suitable, often until in the end, after he is perhaps success the patient that the of the inward disea bird once again pres healthy specimen, but the majority of case has once been serious ever, thoroughly and time it is liable unde such as unfavorable again. But all this is "cured" (?), men it is again all career, which further already delicate cons ther a show bird or a goes into the breeding sibly more or less, contaminate the res most certainly repro same undesirable trait itself been a sufferer up of a show specimen said. The trouble to the owner, but should such a bird b is not only liable to and seasons when lea set breeding arrange surely bring trouble ceeding generations, are sold from such s the means of spreadi country. Ask a farm breed from a glander cow, and yet such a par with breeding that has been affe merous contagious, which poultry are than any other an to their young, an appear in the ne succeeding gene Cures like that at superficial; the tal jority of cases re within ready to provocation, or to spring. The breed produce strong, he exercise the grate from his breeding at any time shown It may seem hard cise otherwise val pay many times of care in this respec we should hear m and failures in po the post-mortem c try organs would poultry-keeping of more remunerat healthy specimen and trouble, and of its breeder.—M

Insect P

In a series of keeper Dr. Cary o says:

Chicken mites in nests and house means of prevent They develop best and under board the house (move the house with ke sible apply tar in