

Attorney-General McCormick, of Pennsylvania, has decided that life insurance policies are not taxable, as claimed.

It is estimated that the cost of carrying ripe beavers from Australia to London is about \$70 per head. The cost for sheep is \$6.

The French Minister of Foreign Affairs has formally announced that there is no French protectorate of Madagascar, but that France has taken possession of that country.

The gift of \$1,000,000 to the Chicago University by Miss Helen Culver, of Chicago, is the largest single gift that university has received, always excepting the princely gifts of Mr. Rockefeller. This gift assures further conditional gift of a million from Mr. Rockefeller. It will go to science.

The Baltimore Manufacturers' Record says: "Florida furnishes the country from 3,000,000 to 4,000,000 boxes of oranges a year. Georgia ships over 10,000 carloads of watermelons every year. In the aggregate, the shipment of early fruits and vegetables North and West probably amounts to \$50,000,000 a year. This business is increasing very rapidly. Ten years ago it was of trifling importance."

Methodist ministers in Chicago are still discussing the case of the young divine who claims that he "unconsciously assimilated" the sermon of Dr. Abbott which he preached a few Sundays ago, and which unfeeling people accused him of stealing. One of the other ministers declared that his defense of "unconscious assimilation" might be all right, but that if he had it that bad he might unconsciously assimilate the clothes of a clothes line some dark night.

Mrs. Julia Ward Howe is well informed on the subject of the Turkish massacre of Christians in modern times, and writes to a Boston paper giving the figures collected by her husband and herself. During her own lifetime nearly one hundred thousand Christians have been murdered by the Turks. In 1822 a Turkish army killed 23,000 Greek Christians on the Island of Chios and sold into slavery 47,000. This is the largest single item, but, as a matter of fact, the slaughter has been almost continuous.

As Thomas P. Wood, a resident of Brooklyn, was crossing Park row, New York City, on crutches one day in March, 1894, one of his crutches caught in a small hole in one of the manhole covers used by the Third Avenue Cable Railroad Company. He fell and was severely injured. He sued the company in the Supreme Court in Brooklyn and recovered a verdict of \$2000, which the trial judge set aside on the ground that the company would not be held liable for such accidents. The case was appealed, and the general term reversed the ruling and directed the recovery of the verdict. Justice Pratt, who writes the decision, holds that the public highway is made for people on crutches as well as others, and that if a railroad company leaves a hole in the street large enough to admit the point of a crutch and thereby injury is occasioned to a person on crutches it is liable for such injuries.

How far can the human voice be heard, asks the Washington Pathfinder? It all depends on the conditions. If we had a pneumatic tube from here to London, perfectly smooth inside, it is probable our "smart set" could acquire the correct Bow Bells cockney dialect at first hands without ever going abroad for it. A man's voice calling "Bob" was recently heard for a distance of eighteen miles, through the Grand Canyon of the Colorado. The walls of the deep gorge confine the sound waves like a closed tube. Lieutenant Foster reports that, when in the Arctic regions, he conversed with a man at the distance of 6996 feet, or about a mile and a quarter. It is recorded that at Gibraltar the human voice has been heard ten miles. When there are no trees, hills or other obstructions to diffuse the sound, as in the Arctic regions or on the water, the voice, of course, has a good opportunity to be transmitted afar. In water it is probably sounds might be still farther heard. Colladon, by experiments in Lake Geneva, estimated that a bell rung under water at sea could be heard sixty miles. Every boy knows that when his head is under water, two stones cracked together by another boy make a sound that is painfully acute. Franklin found that he could hear this sound under water for a distance of half a mile, whereas in open air it would have been lost at a distance of a few rods.

## FIRE IN SNOW-SHEDS.

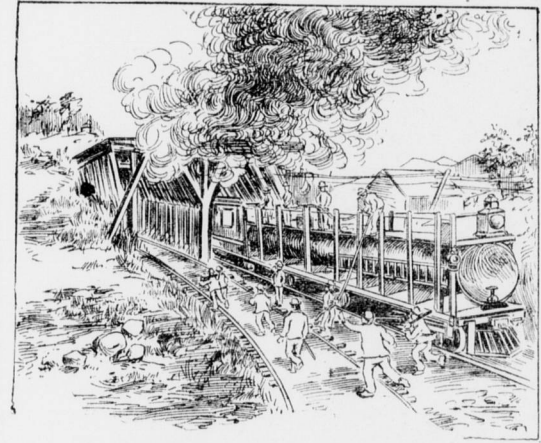
HOW IT IS FOUGHT BY THE CENTRAL PACIFIC ROAD.

An Important Railroad Department—The Company's Property Is Protected by Special Crews—Their Alarm System—Fitzgerald's Excellent Run.

In the Sierra Nevada Range. There is in California a fire department which protects property extending over a distance of forty miles, and costing a million and a half of dollars. The property referred to is familiar to every one who has taken a daylight trip over the Central Pacific Railroad, as it runs from the land of sunshine into the land of sage brush. Owing to the heavy snowfall in the Sierra Nevada the railroad has been



ENGINEER FITZGERALD AND FIREMAN, compelled to protect its track from winter blockades by building a series of sheds to cover it. These extend continuously from the little telegraph station of Blue Canyon to Truckee, on the eastern slope of the mountains, a distance of forty miles. In the winter the



FIGHTING FIRE IN THE SHEDS.

snow protects these sheds from all danger from fire, but when summer comes the wind and sun soon melt the covering of snow and rapidly dry the timbers, until by July 1 the lumber in the sheds is as dry as powder.

The forty miles of sheds are constantly patrolled by men selected for that purpose. Each man's beat is less than three miles long, and is so arranged that he passes over it a short time in advance of every train. Situated at distances of a mile apart throughout the entire length of shed-guards track are placed unlocked electrical call boxes similar to those in use in the cities. On the face of these are inscribed the words "East-West-rock on track-shed down-train wreck-car off-slide-fire." Besides these there are thirty-four alarm boxes, which are kept locked. These are rung exclusively for fire. When an alarm is rung in one of these a gong strikes the number of the box in Sacramento, 100 miles away, and on the different points where the fire trains are situated.

In 1877, J. A. Fillmore, general superintendent of the Southern Pacific, had occasion to reprimand "Johnny" Fitzgerald, of the Summit fire train, who is the oldest fire train engineer in the service, for not running fast enough. A few weeks later Mr. Fillmore happened to be at the Summit when an alarm was rung in from Emigrant Gap, twenty-two miles away. He thought he would like to make the run, and so he boarded the engine. "Johnny" saw his opportunity and determined to make the most of it. As soon as the words "clear track" were received, "Johnny" pulled out, and throwing the throttle wide open let her go. In less time than it takes to tell it, the train was running a mile a minute. Open places in the sheds a hundred yards in extent seemed little more than flashes of light, and the Cascade bridges were crossed with such speed that the train seemed to leap them, as a grayhound does a fence. Mr. Fillmore sat perfectly still, except that once or twice he asked the engineer to test his air. In twenty-three minutes he had made the run of twenty-two miles, and when "Johnny" turned to look at the superintendent, expecting to get a ripping up the back, Mr. Fillmore said cheerily, "That's the way to go to a fire."

Near Cisco is one of the highest mountain ridges on the western slope of the Sierra. On the topmost point of this ridge, at an altitude of nearly 8,000 feet, there is a little cabin, in which a man and his wife and a boy live from the time the first snow begins to appear in the spring of the year until it reappears in the autumn. This man and boy from the point of observation which they occupy can see thirty-five miles of snow sheds. Day and night, no matter how stormy the weather, this man and boy keep their vigil, and at the slightest sign of

fire threatening the sheds a telephone message locating it is immediately sent to Cisco, from which place orders are issued to have it extinguished. These fires are located from Red Top, the name by which the site of the little cabin is known, by means of a dial in the center of which an arrow swings like the needle of a compass. The point of the arrow is directed toward the fire which causes the feather end to cover a marking on the dial indicating the name or number of the place toward which the arrow points.

## STUDY OF THE MOON.

Peculiarities Noted in Its Appearance at Different Seasons.

To the casual observer the motions of the moon appear to be exceedingly whimsical and irregular. If its place in the sky is watched it will be found that it is first north and then south of the sun's path and west of that luminary. The last two motions are steady and regular from east to west, carrying the moon in its endless swing around the heavens, starting at new moon near the sun and progressing until at full moon the whole visible portion of the sky separates the two bodies. After this there are two weeks in which the moon still appears to move backward, approaching the sun from the other side, then, again apparently all of a sudden, it passes the sun and we behold a "new moon."

The north and south motions of the moon are entirely different. While performing its endless journey from west to east there are two special periods in which it either moves far northward or takes up its position low down in the south. In spring the first motion is north, but afterward the general motion is reversed. In December you will note that the full moon occurs at the most northerly point in her course and in June at the most southerly. This is why we have most light from the full moon of winter and least from that of summer. Observations on these various

## ARMY OF THE SULTAN

A FACTOR THE POWERS MUST TAKE INTO ACCOUNT.

A Nation of Soldiers with Brainless Generals—The Turkish Irregulars—Bands of Cutthroats Who Are Worthless Against Civilized Troops.

The Turk as a Fighter. The interest at present felt in Turkish affairs generally is intensified with regard to the Turkish means of defense against the aggressions of Europe, for although the existing difficulty may be smoothed down without an outbreak of arms, still any untoward incident, when affairs are in so critical a condition, may be productive of serious results.

The Turkish empire has long been denominated "The sick man of Europe," but this expression must be understood to apply only to the political state, for, individually and collectively, the Turks are about as healthy a lot of people as exist on the globe. The Government is weak and inefficient, as despotisms grow old are wont to be, but that is no sign that it is near the end of its days, for these Oriental despots have a trick of hanging on to life, sometimes for centuries after they ought to die. The Greek empire at Constantinople lived for five centuries after its territory had been reduced to the region immediately surrounding that city, and it is not at all impossible that the Ottoman empire may not follow its example, and it probably



OFFICERS OF THE NIZAM.

will unless the powers show more unanimity in regard to disposing of its estate. But those who suppose that Turkey will fall in a easy prey to the rest of Europe are reckoning without their host, for lazy and degenerate as they are, the Turks are marvelous fighters, and when their fanaticism is roused, they show a degree of military aggressiveness that has more than once dumfounded their opponents. During the last three centuries they have waged a dozen wars with surrounding powers, and, on each occasion, their opponents were forced to confess that, had the Moslems been properly commanded, the result would have been extremely doubtful. Their weakness has always been the miraculous stupidity of the Ottoman generals. Whenever they have been led by trained officers of other nations than their own, their record has been good. It has always been clear of cowardice. Their fatalistic creed makes them strangers to fear; to them everything is "Kismet" or fate; and if commanded to go to attack a battery, where certain death seems to await every assailant, they neither hesitate nor falter, considering that, if it is their fate to be killed at such a time and place, there is no use trying to avoid it. Besides this, they are a hardy race, capable of enduring great fatigue and hardship without breaking down, of marching long distances without food or rest, and all these qualities, in a soldier, are invaluable.

The Turkish army, therefore, is a factor to be considered in the discussion of the fate of the Ottoman empire, for if the Turks should make up their minds not to be divided up into parcels without a struggle they are capable of offering a very effective resistance to any proposed plan for the partition of their country among the powers of Europe. The area of the Turkish empire is about 1,600,000 square miles, or a little over one-half that of the United States, and the population is nearly 40,000,000, or about two-thirds that of our own. These figures, however, do not furnish a definite idea of the strength, or more properly, of the weakness of the country, for comprised in the enumeration of inhabitants are the people of all the races that were conquered by the Turks, who constitute more than one-half of the whole number, Christians within the limits of Turkey.



A BEGLER.

are regarded as aliens, or rather as enemies, whom both the Government and the Mussulman population would be glad to see downed or exterminated. They are not liable to military duty, but, instead, pay an exemption tax of about \$1.50 a head per annum. Theoretically, every Moslem in the dominions of the Sultan is a soldier on full pay, liable at any time to be called on to serve his master in field or garrison, but such is the corruption prevailing in every part of the Turkish administration, both civil and military, that any one can secure an exemption who is able to pay for it.

There is, moreover, a system of conscription organized by law that is supposed to be carried out in every part of the empire. It is based on the military system of Germany, for since the last Russo-Turkish war the army of the Porte has been entirely reorganized by German officers, who naturally adopted the plan prevailing in their own country, and with which they were most familiar. The military system consists of the Nizam, or regular army, two classes of Bedlis, or Landwehr, the Mustafiz, answering to the Landsturm of Prussia. At the annual conscription the ranks of the regular army are supposed to be filled by the men of the levy, who must serve six years with the regular army and first reserve. They then pass into the second reserve, to be called out only on emergencies. Here they remain eight years, subjected to annual drill at their homes, then become members of the third reserve for six years longer, thus passing twenty years, either in the army or in one of the reserves. This is the system and, in working order, it would furnish the Government with an army, in time of war, of nearly 1,000,000 men. But, like everything else in Turkey, there is one thing and practice quite another, and, as a matter of fact, there are very few districts where the system has been put in running order, and none where the conscripts of the year do not buy exemption from the service whenever they are able to do so. In one case in a military district near Smyrna, the population made a contract with the enrolling officers that, in consideration of a lump sum, paid down in cash, the district should be exempt. The year was paid, the conscripting officers returned fictitious rolls, and went back, rich and contented, to Constantinople. In another, the conscripting officer was prevailed on to enroll the population of the district; in a third all the beggars and poverty-stricken wretches found in the district were entered as conscripts, while the able-bodied men escaped.

In reality, the Turkish army is composed of young men, unable, under the oppressive system of taxation, to make



TYPICAL KURDISH FACE.

their living on the farm or in the workshop, who, therefore, entered the army voluntarily, and such conscripts as could be secured in those districts of Asia Minor and European Turkey where the military system has been put in working order.

There is another class, comprising widely different races of men, who resemble



FOR SERVICE IN ARMENIA.

each other in nothing but the fact that they are all alike, savages. The Turkish irregulars are all cavalry, and probably not since the time of Attila has a worse lot of thieves, robbers, cut-throats, murderers and all round desperadoes been got together. Turks from Anatolia, Kurds from Armenia, Circassians and Georgians who are a wandering life of rapine and murder to the iron discipline of the Russian military service, Persians, the descendants of the Parthians so much dreaded 2,000 years ago, Arabs from the Red Sea Coast, Druses from the mountains of Syria and Palestine, negroes from Egypt, fugitives from justice of every surrounding country, escaped jail birds, anybody is welcome to their hands who has a horse and arms and can ride, steal and shoot. These are the men who desolated Bulgaria; these are the men who are now making Armenia a desert. The only discipline they recognize is obedience to their leader; they have no system of drill and the terror they inspire is the solely to their well deserved reputation as butchers. When they wage war it is not war, but extermination, for they make not the slightest distinction between the armed and the defenseless, killing all alike with equal ferocity. If them an expedition is a raid, during which neither man, woman nor child is spared, and what property cannot be carried off is burned. Our American Indians were gentlemen compared with them, for the Indians did occasionally spare the children, and put them into their tribes and raising them as members of their families, but to the natural savagery of their dispositions the Turkish irregulars add a religious fanaticism of the most exaggerated type—a fanaticism that causes them to regard the murder of a non-Moslem as a religious duty, an act extremely laudable in the sight of Allah and which will entitle them to much credit, both in this world and in the next. Principles, if they can be so called, such as these render the Turkish irregulars objects of the utmost terror to defenseless villagers subject to their raids, and have at one time or another made their name a terror word from Vienna to Teheran. Along the frontiers of Hungary and Poland they were equally hated and feared for 200 years; the Popes of the fifteenth and sixteenth centuries issued special prayers for protection against them; the inhabitants of Southern Russia for a century and a half had an annual fast day to insure immunity from their raids, and

To the regular troops of any civilized power they are contemptible. They are armed with antiquated, flint-lock, smooth-bore muskets, 6 or 7 feet long, pistols of equally ancient pattern and sabers. One coxswain, with a Winchester, a pair of good revolvers and a horse fleet enough to keep him from being overwhelmed by a dozen of them. They are brave enough, in their ferocious, brutal way, but the worthlessness of their weapons renders them a snuff to any organized body of troops. During the war of 1876, one regiment of Russian foot drove before it, in headlong route, over 6,000 of these marauders. A company of forty Russian frontier guards has been known to disperse a band of 700. Worthless for fighting purposes, they are valuable only when murder and pillage are to be done. They are picturesque objects, in their Oriental costumes, with belts stuck full of pistols and daggers, but, in a soldier, picturesque is a quality of very small consequence.

In actual warfare, therefore, with any civilized power, Turkey must rely on the infantry and artillery, the effective force of these arms being less than 400,000 men. Such a force as this could offer a strong protest to the partition of the Turkish empire, but even after its resistance the Moslems, the trouble would not be at an end, for before the division could be performed a campaign in every neighborhood would be necessary. The fanatical hatred entertained by Moslems for everybody and everything Christian is almost inconceivable by the Western mind. When, at the close of the war of 1876, Bosnia was assigned to Austria, an



A HIGH PRIVATE.

army of nearly 100,000 men was needed to complete the transfer of the territory, although there was not a Turkish regiment in the province. The Moslem population rose en masse, the women fought side by side with their husbands with guns, pistols, swords, hatchets and even pitchforks. Military operation had to be carried on against every village, and a year elapsed ere there was complete submission and order was restored. In case of partition of Turkey were attempted, population uprisings might be expected in every province from Albania to the Euphrates. They would all be ineffective, of course, but they would all be bloody and costly. A knowledge of the facts that Turkey is by no means helpless, even with a bankrupt treasury and corrupt administration, has probably something to do with the general willingness to give the unspeakable Turk a little more time. Nobody believes he will reform, but his army is too big and its fighting reputation is too well established for aggressive operations to be thoroughly undertaken.

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Some people have been making a count and find that not one of the State governors in the United States is a Roman Catholic. There are no Roman Catholics in the Cabinet, none in the Supreme Court, and there never has been one in the White House.

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## Topics of the Times

London funerals cost over \$5,000,000 annually.

The commercial marine of Canada gives employment to some 60,000 sailors.

A Japanese seal fishing company has been organized by Tokio capitalists to compete with foreign sealers off the coast of Japan.

An area of 5,000 square miles south of 60 degrees north latitude in Canada is suitable for the production of all crops grown in England.

A Chesterville, Me., couple recently celebrated their golden wedding in the very house into which they moved on their wedding day fifty years before.

Almost the only monument of the Roman dominion in Egypt, the fortress of Babylon, at old Cairo, is being torn down to make way for modern buildings.

Kildare and Wicklow have been justly termed the garden of Ireland, for nowhere is nature more profuse in her display of the picturesque and the beautiful.

A footman in an English nobleman's house testified recently that his regular pay was \$250 a year. He also testified that his average "tips" amounted to \$3,000 a year.

The Magna Charta, or great charter, of English liberties is still preserved in the British Museum. The impress of the seal and King John's name are both very distinct.

A Kansas district has a written contract with a teacher to teach the school, chop the wood, make the fire, sweep and find the matches for \$35 a month. The teacher is a woman.

A mass of eels weighing 300 pounds clogged the water wheel which runs the electric light plant of Riverhead, L. I., the other night, and the town was in darkness for several hours.

Of the 4,914 seal skins brought into Port Townsend, Wash., during the season just closed 3,650 were of female seals, an indication of the rate at which the seal herds are being destroyed.

The persons of African descent in the United States are classified according to the degrees of colored blood into 6,337,980 blacks, 956,989 mulattoes, 105,135 quadroons and 69,936 octoroons.

A seaweed of the South Pacific often grows to be thirty or forty inches in diameter and 1,500 to 2,000 feet long. It has no root in the proper sense, the nourishment being absorbed from the water.

Down to the depth of 200 fathoms, where daylight appears, the eyes of a fish get bigger and bigger. Beyond that depth small-eyed forms set in, with long feelers developed to supplement the eyes.

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