Thereare 106 different kinds of typewriters made in the United States. but only one kind of a successful typewriter.

The Jews are much more exempt from tubercle than any other race, and there is little doubt, says a medical writer, that much of this exemption is due to the great care exercised. in the choice and dressing of their ment.

During prosperous times the sugar crop of Cuba averaged 1,000,000 tons annually. The total product of 1895-96 was 225,221 tons; of 1896-97 the product was 212,221, a deficiency this year as compared with last year of 13,-170 tons. The shortage is only one of the penalties of war.

Several secret societies composed of workingmen in Denver, Col., have determined to boycott the department stores. As all of these organizations have branches with women members. who are the principal patrons of the stores, a lively contest between the affiliated bodies is expected. The women want to shop where they can get the best bargains, boycott or no boycott.

Jeffersonville, Ind., is proud of a veteran of the war, who lives near there, and is the father of nineteen living children, all of whom were born since the war. The eldest child is thirty years old and the youngest seven. Among the children are four sets of twins, Newton Norris, the father, draws a pension, but if he lived in Canada he would be receiving an additional sum for adding so generously to the population.

How many people know that the United States produced last year onefourth of the world's gold, or about \$60,000,000 worth? And Colorado is credited with about one-third of this as her share. These figures, furnished by Robert E. Preston, director of the mint, tally very closely with those furnished by The Engineering and Mining Journal, which gives \$241,-391,639 as the world's total production of gold for 1897, an increase of more than \$29,000,000 over 1896. The gold found in the Klondike region swells the Cauadian output from \$2,810,000 in 1896 to perhaps \$7,000,-000, during last year.

One of the most surprising discoveries of the century has just been made by Professor W. M. Flinders Petrie, the great Egyptian excavator. He has found that the Pharaohs who built the pyramids and their predecessors were cannibals-that this wonderful people, who erected the most splendid temples and the most colossal monuments, and who possessed a civilization that has astonished the intervening ages, ate the bodies of rough, hard service than for beauty. their dead. He has opened 150 tombs, and from them taken many mutilated remains of the victims of cannibalism. Professor Heinrich Brugsch. continning the study and investigation, adds his opinion that the ancient Egyptians were maneaters of the worst kind, and brings forward conclusive evidence showing that they not only offered up human beings to the gods, but regularly used the flesh of human beings as food. E. J. Berry, an expert horse grower, in an address at a recent convention of American stock breeders and feeders in the city of St. Paul, referred to a condition in the markets which is of great interest to the horse trade of this country. He declared that he and other men conspicuously engaged in stock raising believed that the United States would at no distant day witness a horse famine, and that it would be due partly to the hard times and low prices which have driven many growers out of business and partly to the increasing demand for American horses in Europe. He said that horse raising, if properly attended to by farmers, would speedily become one of the very foremost of our agriculturul interests, and his recommendation was that special attention be given to growing horses of the gradein demand in foreign markets, which he described as follows: First a wellbred coach horse; second, a cab horse; third, the omnibus horse; fourth, the draft horse, and fifth, the American trotter. To these Mr. Berry might have added the cavalry horse, which is growing in favor wherever American stock has been used in that service. There is but little, and there will be still less demand for poor horses, here or abroad, but there is undeniably a growing market at home and in Enrope for thoroughly sound, properly hred animals such as American ookman are amply able to raise. There is no reason why this portant branch of agricultural ininstry should not experience a wide.



my. Comparatively little is known about the Signal Corps of the army and its important work, and it is the purpose of this article to describe in a general way some of the interesting things this little body of men accomplish in these days of military progress. Aerial military manoeuvres, photo-graphing from great heights and distances, laying, equipping, and opera-ting telegraph and telephone lines in time of battle at a rate as fast as a horse can travel, are interesting matters, and all of them are achieved by this branch of the service.

The Signal Corps on a peace footing consists of ten officers and a score of more sergeants, together with small detachments of enlisted men detailed for this special service on the frontier where instruction in the work of the corps is being given. Brigadier General A. W. Greely of arctic fame, is in command of the corps and has his headquarters at Washington, D. C. The largest school of instruction at present is at Fort Logan, Colorado. Captain W. A. Glassford, Chief Signal Officer, of the Department of the Colorado, is in charge and has in his detachment three Sergeants and eighteen detailed enlisted men.

In the present day, owing to the rapid advance made in modern fire-arms, the necessity has arisen for a means of instant communication from one part of a battlefield to another. For the transmission of orders, instruction, reports, &c., nothing is so swift as electricity. The manner of its adaption for this work is interesting in the extreme, and the means by which telephone and telegraph lines are put up and operated are unique and origi-The aerial exploits of some

of these men outrival the wildest dreams of fold-time aeronauts-for a balloon train is now a part of the field equipment of the modern United States Army.

The country surroun ling Fort Logan is particularly adapted to the uses of the Signal Corps for field work. Its diversified character renders the correct and practical use of the various instruments employed easily taught. The high peaks immediately in the back ground afford lofty stations in temperate weather for long distance signaling and heliographing. Supposing that a state of actual

warfare exists, we will go with the signal men into the field aud see how signal men into the net component inter-the field telegraph and telephone lines The electrical batteries are securely packed in wooden bins or cells in one of these wagons, to prevent their top-pling over in transit. Another compartment in this same wagon provides safe storage for the telegraph instruments and necessary supplies. The wagon is drawn by two or four mules as the nature of the country demands.

UNCLE SAM'S SIGNAL CORPS. ity as if the instruments were at-tached to a solid wall in a comfortable

Field Telegraphy and Military Ballooning Described.

ZACIOIOIOIOXOIOXXOIOIOIOIOIOIOIOIOIOXOXOXOXXXX

NCLE SAM has | order to halt was sounded. The offisome little tricks cer in command had selected his im-uphissleeve, which aginary line and directed the battery in time of war could be brought tion when halted. The men ran to into service at a moment's notice others of them attacked the pole, or and which, says W. | lance truck, and in an instant a stream J. Rouse in the of poles was issuing from that wagon New York Times, that could only be approached by an would prove very army of circus employes dismantling a big tent.

The general direction of the line was indicated by the officer and the men set to work. Two of them, arme with huge crowbars, trotted off in the duced by means of long and short direction the line was to take. One flashes of reflected sunlight. While of them halted at about fifty or sixty it is true that any operator may read



office.

yards from the battery wagon and the words spelled out in this manner, thrust the sharpened end of the steel yet the information thus gained would yet the information thus gained would bar into the ground. The other passed be totally unintelligible to him, as him and went twice as far, when he, everything is sent in cipher. too, thrust the sharp instrument into the yielding soil. The first man had An exhaustive system of signaling,

by a flexible wire and commutcation is

possible at all times, even while the wire is being laid. Messages may be sent and received with as much facil-

Eminences, hills, bluffs, or other elevated portions of land, when so lo-cated as to be in view of headquarters

in the field, serve as admirable sites for

heliograph stations. Of course, unless

an uninterrupted view of the country is to be had, no heliographic signal

ing can be accomplished. The system

in vogue now in the Signal Corps is the latest and most improved, in the

matter of instruments procurable, but

the method which provides for the

transmission of messages by light flashes, is old. It is astcunding, how-

ever, to note the fact that telegraphic

messages have been flashed with this

little instrument a distance of almost

200 miles. The system of dots and

dashes of the telegraph code is repro-

by means of flags and heliograph by day, and at night with rockets, bombs, flash-lanterns and electric searchlights, now run around him, and his place, where he had dug the first hole, was taken by a group of men armed with one of the lances, an insulator, and is in vogue. Messages can be sent, under any and all sorts of conditions, and in the face of seemingly insur-mountable obstacles, so that a com-mander may at all times be kept fully spinning out of the rear end of the wire wagon. In less time than it takes advised of what is transpiring in any

or all of his commands. Military ballooning has also ad-vanced to such a state of perfection during the past few year that it will be perfectly within the range of possibil-ity, in case of war, to accurately photograph an enemy's position, obtain ac-curate maps of his fortification, etc., without sending any one within his lines. There is at Fort Logan, a fully equipped balloon field train, ready for service at any moment.

The balloon train consists of three wagons, similiar in construction te those described above, and which transport the field telegraph parapher-nalia. The balloon itself, a huge affair, has place in the forward end of the wagon. At the rear end there is a large reel, upon which are carried sev eral thousand feet of stout cable. In a middle compartment to the balloon wagon, room is reserved for the basket and netting. In the second wagon are stored the hydrogen gas tubes needed for inflating the airship. These tubes are constructed of steel and are as light and as strong as it is possible to make them.

There is a generating plant for gas at Fort Logan, and it is there that the tubes are filled. They are shipped, in such quantities as may be needed, to

various points throughout the country. A supply sufficient for several inflations can be carried with the field train, and if larger supplies are needed, additional wagons are pressed into service. The balloon itself is constructed of the finest and most costly material, gold beaters' skin being used



The House Behind the Screen.

little house behind the screen, I keep my playthings there; My shovel and my pall for sand, My blocks and books and marbles and My little rocking chair.

My playmate on the hassock sits, As quiet as a mouse; He never talks the whole day through, Or stirs, unless I tell him to, Within my little house.

Alone with me he knows he's safe From giants passing by, And when we play it makes him glad, How many happy times we've had, The rubber boy and 1!

He always heeds just what I say And knows just what I mean, We don't believe that any man Could build a finer palace than Our house behind the screen, —New York Herald.

A Note for Stamp Collectors.

Stamp collectors will have to make room in their albums for a new set of Netherland stamps. Holland has al-ways been very slow to issue stamps, and the total number is smaller than that of any other country in the world. But this year the girl queen Wilhelmina is to be crowned, and stamps bearing her portrait will be issued in honor of the great event,

The Crustagen.

The crustacea are almost all aquatic animals. They have no internal skeleton, but their body is covered with a strong crust, which serves for protect tion as well as for strength. Their whole framework consists of a series of rings fitted to, and working in each other, some forming limbs, and others leveloping into the framework supporting the different organs, From his reason, they and the remaining animals, as far as the star-fishes, who have no limbs at all, are called "articulated" animals.

Their method of growth is very curious. Other animals, as they in crease in size, experience no particular inconvenience. Not so the crustacea. Their bodies are closely enveloped in a strong, unyielding mail, which cannot grow with them. Their armor is therefore cast off every year, and a fresh coat formed to suit their increased dimensions. Not only is the armor cast off, but even the covering of the eyes, the tendons of the claws, and the lining membrane of the stomach, with its teeth. They all also possess the curious power of reproducing a lost or injured

imb. In the former case, a fresh limb supplies the place of that lost; and in the latter case, the animal it-self shakes off the injured joint, and a new one soon takes its place. sters, when alarmed, frequently throw off their claws.

The decapods, as their name imports, are the fortunate possessors of ten legs, five at each side. They also possess three pairs of jaws, besides the teeth in the stomach. They breathe by means of branchiae or gills fixed at each side of the throat or chest, often erroneously called the head.

The common crab belongs

sport. While the nights are enlivened with balls, hops and concerts, the days are devoted to snow-shoeing exenr-sions and tobogganing parties, in which all, both sexes and ages, join, and which brightens the hill slopes and river banks throughout the do-minion. minion.

The Canadian toboggan proper is a light curved slip of birch bark, daintly ight curved slip of birch bark, daintly pointed or embroidered in quaint Indian style, which glides down the icy slope with delirions swiftness, and, skillfully guided, carries its occupant far along the level ground at the base. In some places in Canada there are courses of wood erected, and during the long winters the during the long winters the sport can

be frequently enjoyed. There is just danger enough in to-bogganing to make it exciting. An incantions guide may upset his passengers or run into another toboggan. The pace being from thirty to sixty miles an hour, a collision may result in some serious bruises. In most places the course chosen is some natural declivity where the undula-tions may be smoothed down so that the incline is even. Water is some-times poured down the slope and allowed to freeze, so as to increase the slipperiness of the surface. — Detroit Free Press.

A Precious Bug.

I remember once finding on the top shelf of a cupboard a package of queer little things, over which I was puzzled. They were about the size of half a kernel of rice, perhaps larger, ribbed and hard, and silvery-looking, but on being handled, shedding a dingy powder which left exposed a lustrons nurnish successful relations purplish surface striped with white lines.

Were they seeds? and if so, seeds

of what? or were they bugs? In an so, see as of what? or were they bugs? I was told that they were insects, costly ones, the cochineal from which the most beautiful red color in the world was obtained, and that the rich world was obtained, and that the rich carmine in the box of water color paints was made from them.

It is wonderful that such a tiny creature, a small parasite, should become an important article of com-merce; that the business of raising cochineal should be the chief occupation in certain places in warm latitudes.

The home of the cochineal is in Central America. When the Spaniards arrived in that country they found the Indians using a superb color, and soon learned about it, and kept the knowledge a secret from the rest of the world.

The principal place for raising coch-ineal is Oajaca in Mexico, the capital of the state of the same name, in the southern part of the Isthmus of Tehusouthern part of the Isthmus of Tenn-antepec. The people are mostly In-dians, and they understand how to care for the insects, which require al-most as much attention as silkworms. The plant on which they feed is a species of cactus, resembling some that we cultivate. This cactus grows that we cultivate. that we cultivate. This cactus grows about five feet high, and the leaves are thick, full of red juice and covered with prickles. The creatures do not in reality feed, but pierce the covering of the leaves and extract the juice, which by some process of nature converts the tiny live thing into a solid body of dye. They literally sap the plants, so that the cactus groves have to be renewed frequently. In the suburbs of Oajaca there are

acres of gardens and plantations de voted to cochineal culture. Two crops of the bugs are gathered in a year, one in December, the other in May The female cochineal are placed in little nests or baskets of moss and fastened to the best places on the cactus, so that the thousands of eggs may be laid when the food is suitable for the newly-hatched insects. When the time for collecting bugs for market comes, the Indians brush them off with a squirrel's tail, or pick them off with a blunt knife. A man can pick only about two ounces a day. It takes seventeen thousand cochineals to weigh a pound. The next thing is to kill them, and there are several methods. One is to brush them into a basket and dip it into hot water, and others are to put them in a hot oven, or on hot iron plates, or in the scorching sun. The different ways make a difference in the outside appearance of the bugs, and also in the beauty of the dye itself.



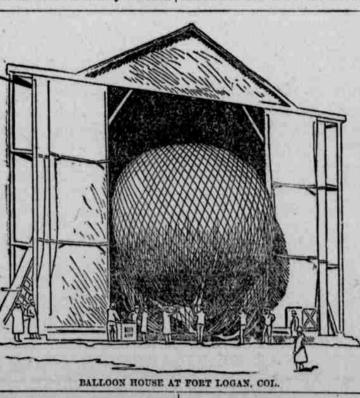
THE BALLOON WAGON.

the end of the wire, which was now

magic and one could almost see them run. In an incredibly short space of time-but little longer than it would have taken me to walk to the edge of the timber-the line had disappeared among the trees. While I was won-dering what would be done next, the instrument in the battery wagon began to tick and a message came in over the newly constructed line asking for further instructions. Orders were flashed back and the line was continued all the way to the foothills.

At times, in actual warfare, it is not only desirable but necessary for a com-manding General to get instant news from the very front. Of course a field telegraph line like the one just de-scribed could not be maintained there long. To overcome this, however, the field telephone can be used, and, in case its instruments are out of order

to tell it, the lance or pole wasset, the insulator was in position and the wire was attached. The men wers already at the second station, where a pole was going up, before I had time to make a photograph. The men with the crowbars were now far away and going further all the time. That row



The second wagon is known as the wire wagon. It carries a supply of ordinary galvanized telegraph wire sufficient to erect a line ten or a doz-en miles in length. This wire is car-ried upon reels which pay it out auto-matically, once the line has been started. The third wagon carries the started. The third wagon carries the started. The third wagon carries the slender poles or lances, together with the necessary insulators to support the wire, and tools for setting the lances in the ground. In boxes along the sides of this wagon are carried the additional small supplies which may be needed in cases of emergency. The wagon train jogs along at a fair rate of speed after leaving the post, and no one knows, except the offleer in command, just where or when the line is to be put up. The order for "dou-ble time" was given, and after the men hol wotted a short distance, the

in actual battle, as brave men are able to carry it. Its wire drags on the ground and is, of course, thoroughly insulated. It is of sufficient strength not to be injured by the passage of troops over it. The wire is carried on a little steel cart, drawn by hand. It is wound upon a reel that works al-most without friction, and wire can be laid as rapidly as a man can run. The operator in charge of the field telophone carries a set of diminutive yet perfect field instruments in a insther case at his side. These field instruments are instructed to the wire

for this purpose. The heavy wagon is of sufficient weight to hold the balloon captive, and if a change of base is necessary during an ascension, the wagon has simply to be moved in the desired direction, Telephonic com-munication is maintained through the cable which holds the balloon to the

wagon. As the members of the Signal Corps are also topographical engineers it is a simple matter for them to prepare accurate maps of the country beneath them, while suspended out of harm's way above an enemy's camp. The adoption of teleophotographic lenses also gives them means by which as accurate photographs can be made as if the artist were actually in the fortifications.

Statistics show that it is almost impossible to hit a captive balloon with musketry fire when at an elevation of 2000 feet. The balloon is kept moving almost incessantly, and in that lies a great measure of its safety. Nearly all the standing armies of the world are now equipped with balloon corps, and the value of this sort of

surveying in time of war is incalculable, at least it is so admitted by the military experts, and they ought to know.

Whether or not experiments have been made in the use of explosives dropped from balloons, I have not been able to learn, but, from what one can see of the use of these aerial monsters at Fort Logan, it would not be strange if the wildest dreams of

moderns may soon be realized and the terrible death-dealing airship may soon evolve, as did the Holland submarine boat, from Jules Verne's "Twenty Thousand League Under the Sea."

Asylums For the Homeless

Paris has, apart from two places where paupers can spend the night, fourteen asylums for the homeless, fourteen asylums for the homeless, which last year lodged 144,037 per-sons, of whom 15,557 were women and 2606 children. Among the lodgers were 246 professors and teachers, eighteen students, five authors, five journalists, 120 actors and singers, thirty musicians and sixteen music teachers

short-tailed decapods, -Detroit Free Press.

Tobogganing.

This sport, under different names, is popular both in Canada and Russia. Before nihilism had terrified a great part of the life and gayety out of the Russian court, it was a popular pas-time even among members of the

imperial family. As soon as the Neva was frozen over sufficiently to bear the weight, two immense piers of solid ice were built at distances of about a quarter of a mile apart. On one side there was a flight of steps to the top, and on the other a precipitous descent at about an angle of forty-five degrees. The sport consisted in descending this incline in a small sleigh, or toboggan. The pilot and his one or more pas-sengers having descended the first in-cline, ascended the steps of the other pier on foot, and made the return journey. The trip was repeated back and forth until the parties were weary of the sport.

A toboggan may accommodate three or four persons, but the smaller sleighs made to hold only two are more common in Russia. A vory

slight movement suffices to guide the toboggan or to throw it out of its course. The steering is done by the occupant of the back seat. An inex-perienced pilot, finding his toboggan careening toward the right, is apt to put too much force into his efforts to change its course, and so upset both himself and his passengers. The to-boggan responds to the slightest touch. A stick of wood is sometimes used in the guiding, but it can be readily done by the hand.

To enjoy a toboggan ride it is nec-essary to be well skilled in the art of guiding the sleigh, or to have great guiding the sleigh, or to have great confidence in the person who is to do the steering. By the time the to-boggan has reached the level, it has required velocity sufficient to carry it a very long distance. In Canada, where some people who are not fond of the cold weather assert that the winters are "thirteen months low," tobogganing is a nost popular i

After they are dried they will keep a hundred years without losing their coloring property. No one who has examined the cochineal insects and crushed them to a dry red powder can doubt this. And no one need wonder that the Europeaus who first saw them in this state thought they were seeds or some kind of grain.

It is nearly four hundred years since the invading Spaniards first knew the source of those incomparable red dyes among the obscure Indians of Central America. Now, from the city of Oajaca about five thousand pounds of cochineal are sent away each year. That is only one place out of many, though the most famous. One can judge of the importance of this little creature, in learning that in a single year over two million pounds went to Great Britain alone.

Cochineal was formerly cultivated only in Mexico, but now it has been introduced into Spain and the French possessions in Africa.—Amanda B. Harris, in Boston Bouquet.

She Couldn't

Penelops-Cholly fell through the

ice yesterday. Marie--Indeed! Then the ice can't beer him, eithen