

ARMIES TURNED INTO ICICLES.

The recent death of Sir James Dewar, the great chemist, who astonished the scientific world by his discovery in 1911 in solidifying hydrogen at a temperature of 470 Fahrenheit degrees...

Revolution of Human Life. The practical outcome of this discovery was stated by a scientist as "efficient to revolutionize human life."

"This discovery is a mind of scientific imagination is fraught not alone with the most alluring possibilities for the well-being of mankind, as it may be applied to the increase of comfort and health, but with possibilities of destruction and death beside which war is as a plaything."

"Let us divide the proportion into two parts," he continues, "being pressed for an explanation of such a startling statement. 'Some years ago, when I was conducting some experiments in a cold storage establishment, I sent a number of workmen through the plants to inspect what are called ammonia gates. These are valve-like openings, by the proper action of which the expansion of the ammonia gas may be regulated at will, the rate of expansion determining the temperature.'"

"One of these men, in some way which no one will ever know, kicked open an ammonia gate. Not only was the man killed by the fumes, but he was frozen solid and broke in pieces when he struck the floor."

"Now, when you consider that liquid helium is as much colder than vaporized ammonia as a piece of ice is colder than molten lava, you will realize the appalling consequences of its power as an agent of death, should it be employed as an instrument of war or private vengeance."

"Suddenly liberated in a battleship, it would not only instantly freeze to death every man on board, but the inconceivable cold would at once cause the ship itself, with all its guns and machinery, to fall in pieces."

"An office building cooled by the medium of liquid helium could be wrecked in an instant by the hand of a maniac or one bent on revenge, and every one of its occupants transformed to ghastly statues of ice. I am not romancing."

"Just as sure as we are now conquering the buoyancy of the air, we shall achieve the control of its temperature."

While affidavits are protesting friendship at State banquets, secret wives will be laid, and suddenly, at midnight, perhaps, a whole metropolis will become a splintered ruin, and its inhabitants frozen solid at their occupations. It is as possible as the telephone was when St. Paul's Cathedral was built."

"But this picture of a future that is a bright side as well. It is in the realm of sanitation that I can see the vast utility of this great discovery. It means the practical stopping of the process of putrefaction for one thing."

"A hollow wire of liquid helium just small enough not to freeze water run through every pipe in a city would not only absolutely deodorize the city, but it would kill every germ of disease. Water mains and sewer pipes would be absolute non-conductors of death—as they are now its chief thoroughfares."

Never Recovered. "Yes, of course I've been in love. Was mad about the girl, too, but she gave me over and made a regular fool of me."

"Poor boy! And you've never got over it."

"I Am the Unimproved Highway" By H. C. Andrews. The feet that pattered in prim-aval slime gave me birth. Unchanged while through ages past I have endured, time has but served to increase my infinite variety. Earthborn, and without a soul, yet have I lived. From the beginning I have been man's enemy.

I have snared caravans that left bleaching bones in lands now desert. Empires have fallen because of me. I have tramped victories into routes; I have tramped mighty leaders and have crushed armies. Today I am fair to look upon. Tomorrow a steaming bog. I add difficulty to distance.

With isolation do I inspire to unjoin the endeavor of men. I tug at the wheels of the grain cart that bread may be dear. I hamper those who would feed the race. I am an enemy of church and school. I mire the heeler on his roads and delay his coming that little ones may die.

I am a disrupter of home. I speed the freshborn to the cities when I am fair to see, and when he would return I see him with my forbidding depths. When men glow with a crooked stick, I see there, when the ancient ones bow me with stones I slipped away to other lands. I am the oldest lie that lives to-day. Men count me cheap. I know the price they pay who count me so.

I am the highway—the unimproved highway. My name is mud.

British Soil in France Holds Empire's Dead

Imperial War Graves Commission Has More Than Six Hundred Thousand Graves—The Unknown Soldiers Number Large in Every Cemetery. By H. S. Murton

The season of pilgrimage to France has begun. Almost nine out of ten of the English who crossed the channel at Easter were on their way to cemeteries where lay British soldiers. And their knees were striking down from Calais to Boulogne or Ostend into the devastated area of France and Belgium.

The work of the Imperial War Graves Commission is one of the most solid and enduring of the modern world. These people who come to see the abiding place of their dear ones see also the ruins of a war that has devastated in England and think, "Why shouldn't Germany pay?"

A Huge Work. There are over 600,000 British graves in these military cemeteries. Some of the cemeteries are huge, like Notre Dame de Lorett, near Souchez, which contains 6,000 graves, French and British; Boescheffe, near Poperinghe, containing 20,000; Hooge, with 2,000, all British. Others are quite small, containing only 50 or 60. There are some cemeteries which are entirely British, others contain both British and Allied, but in the latter case the graves are not mixed, but the British are all together, apart from the others.

War Graves Commission. I had an interview with the chief registrar at Arras, where it is literally true, he told me, that this is British soil in France. The land is held as a gift by the French or Belgian government in some cases, in others the L.W.G.C. buys it.

The legal staff of the Commission searches the titles and records a deed so that if we wanted to insist on our rights we could demand a passport from a Frenchman who wanted to enter. The cost to the British Government comes to about £10 (ten pounds), per grave. The Commission is divided into three parts, the legal, the registration and the works department. The duties of the first are obvious. The duties of the second are to register all the graves, to keep a record of all the graves, to register in each cemetery for inspection by visitors, identify if possible all new bodies found and record their in-

terment, superintend the changing or renewing of crosses, and generally keep the registers straight of all the graves. Works Department. The works department constructs the cemeteries, exhumes bodies lying out of cemeteries and interments them, keeps the grass-cut and watered, plants the flowers and keeps the premises in order. Competent engineers are at the head of the works department with head gardeners under them. The whole staff is British, though foreign labor is employed for digging and chipping monuments. Each cemetery, how-

ever small, has at least one British gardener to tend it. Can Get Photograph. There is a great deal of work to do. The present wooden crosses are only temporary. In time every soldier will have a stone monument erected at his grave. Anyone who wishes a photograph of a grave can get it by writing to the War Office, Whitehall, London, not the L.W.G.C., giving name and number of plot, number of row and name, regimental number, and battalion. The location can be found from the registers. The War Office has photographers in France who are there for that purpose.

Many Unidentified. It is surprising the number of unknown soldiers who rest in every cemetery, not strange when one considers the fearful effects of shells, but one would scarcely expect such a high percentage. Row after row of crosses read "Unknown British Soldier," "Unknown Canadian Soldier," "Unknown Canadian Soldier, 116th Battalion," and so forth. These graves will all have their stone monument as they have now their wooden crosses. Flowers deck their graves the same as the identified soldiers.

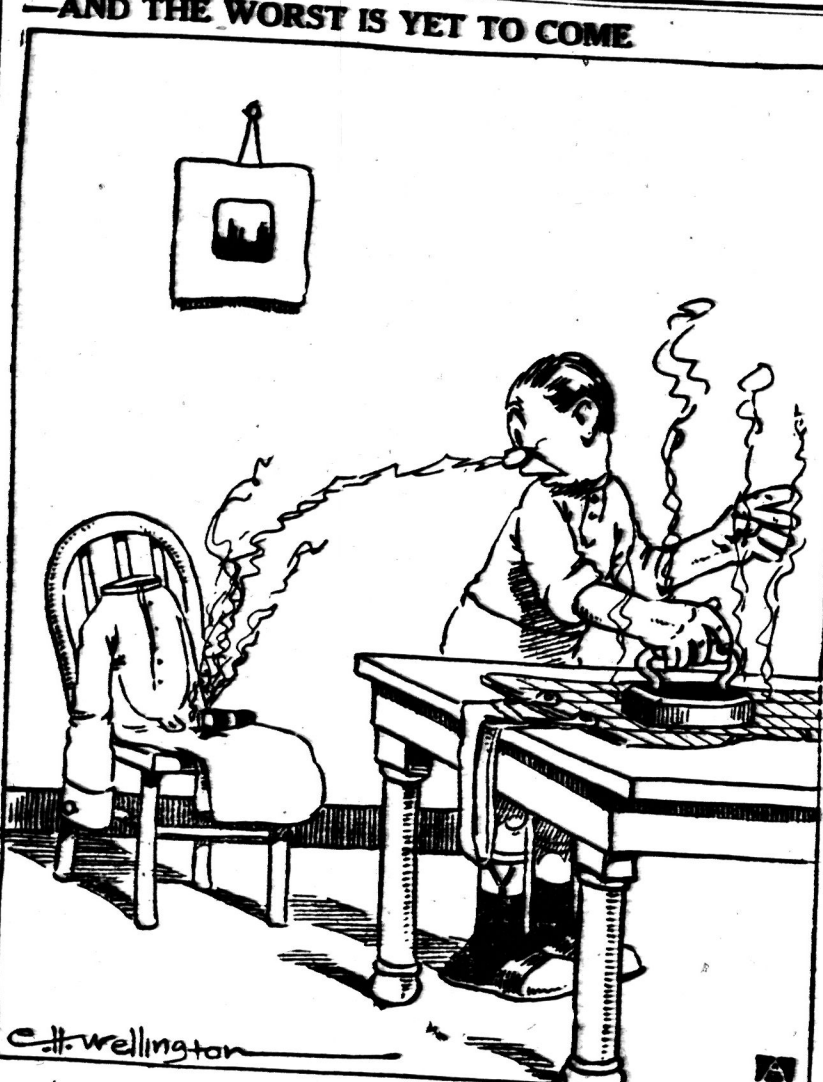
Always New Graves. Hardly a day passes but some farmer ploughs up a body buried under light soil. The L.W.G.C. is notified and a man is sent from the registry office to identify. This is done either by the identity disk or by the number on the boots. This latter is the most frequent way, the registrar told me, as a record is available of the number of the boots issued to each man and he may be traced often by that circumstance, other means failing. Then there are bodies buried and identified outside cemeteries. In some cases relatives do not want them disinterred for sentimental reasons. But it is impossible to tend these graves all over the country, in time they see the possibility of having them interred in the regular locations and give the authority. The works department then exhumes them and they are interred alongside their comrades. A lone

grave in the country is bound in time to lose its identity. Fruitless Search. There are many pathetic cases. The registrar told me of English mothers who come over and wander from one lost son up and down the rows and scrutinize the names. Especially they wander through the rows of unknown soldiers. Sometimes they get an obsession that their lost one is beneath a certain cross. A case happened recently near Arras, where one woman lay beneath one of these crosses. She bribed a Belgian workman to exhumed the body at night with the intention of taking it to England and burying it near her home. The attempt failed when the cart on which the body was being conveyed broke down in the road and its contents were discovered. The French villagers living near the cemeteries are supposed to report such cases, in fact can be punished for not so doing, but though they know, they shrug their shoulders and say, "Why not, if it gives the poor woman comfort?" Such cases are not at all uncommon.

A New Model. Some cemeteries are much farther from than others. One called New Oxford Road, near Wiltye, is a good type of what the completed cemetery will look like. A white stone wall with graceful curves and arches surrounds it just high enough so that one can see over it from the road. It is laid out in the form of a cross with the center in the middle of a wide, straight, gravel path. The head stones are about five feet high from the ground. On them is carved the soldier's name and regiment, the date he was killed and the regimental crest below the name. The head stones of the unknown soldiers are the same size, but instead of the wide arched cross, engraved on the stone at the top reads, "A Soldier of the Great War," then a slender cross carved in stone and below that, "Known Unto God." There will be hundreds of thousands such when the work is all completed.

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THREE KINDS OF GAS SHELLS

If the war had continued for another two years it is likely that poison gas would have become the deadliest weapon in use. This is the chief danger of a new volume of the official medical history of the war, issued by the British war office.

One of the most striking features of the volume is the description of the way in which the Germans employed gas shells of various composition for bombardment.

Broadly speaking, three kinds of gas were used—green cross, blue cross and yellow cross. Green cross shells contained acute lung irritant. Blue cross contained sneezing and tear gases. Yellow cross contained "mustard gas," which not only possessed a delayed poisoning power, but was a blistering agent.

First Two for Harassing. The first two types of shell were used for general harassing or neutralizing purposes, or in preliminary bombardment; while the use of the yellow or mustard gas, was intended to be restricted to areas which there was no intention of occupying or advancing over, but where there was a likelihood of rendering a number of casualties and other important points untenable.

Turnable Fire-Lighting Unit Is English Ladder Extension Truck

An effective fire-fighting unit is seen in a new extension ladder of English manufacture which is considered remarkable for its great "reach." The ladder is built to reach heights of 90 feet and upward, and is mounted on a turnable carrier over the rear axle of a motor truck. It can be used either for life-saving or as a water tower.

Motorist (after counting ten)—"No, I just thought it would be a good idea to change the air in this tube."

The Passerby (to motorist at roadside who is red in the face and puffed from pumping up a tire)—"What's the matter? Have a puncture?" Motorist (after counting ten)—"No, I just thought it would be a good idea to change the air in this tube."

Last Link in 6,500-Mile Highway Completed

With the official opening of the Banff-Windermere Highway in the Canadian Rockies scheduled for the near future, the last link in a 6,500-mile chain of scenic roadway will have been welded into place, making an unbroken circuit from California to Canada and return. It passes through Grand Canyon Park, Yellowstone National Park, Glacier Park, and the Shuswap Indian Reserve in western Canada, and traverses part of a most picturesque country. From Macleod, in southern Alberta, a "rectangular" route can be covered, including the beautiful 93-mile link from Banff to Windermere, just completed. One side of the rectangle runs north from Macleod, crossing many streams, through Parkland and Midnapore to Calgary. Here the road makes a great winding turn in a

X-Rays for Plants

A London scientist uses X-rays to study and diagnose plant diseases. Although it has a huge tongue, the whale has very little sense of taste.

Streamlining Cuts Down Head Resistance

Concentrating their attention on scientific streamlining, Franco-British engineers have designed a most unusually shaped automobile which they believe will prove very speedy, since head resistance to the wind has been cut down considerably. The body is built of duralumin, a new light alloy that is making airplane fuselages. The under part of the car is increased in sheet aluminum, only the brake drums and axle projecting. Entrance is gained to the car by a side panel, and by a part of the roof and a section of the fender being hinged and, so, easily raised.

Gas Furnace

Overcome while working at gas furnace at Grille Park, E. Percy, president of Sanderson found by evening. Clair Averett tried artistry available. A gas furnace at Grille Park, E. Percy, president of Sanderson found by evening. Clair Averett tried artistry available. A gas furnace at Grille Park, E. Percy, president of Sanderson found by evening. Clair Averett tried artistry available.

Translating The Bible Into Strange Tongues

BY ARTHUR CHAPMAN.

ONE of the world's great achievements, which has been going on steadily for many years, is the translation of the scriptures into various languages and dialects.

It is estimated that there are 1,000 of these tongues, and such has been the determination and patience of the translators of the Bible that at least some portion of the Scripture has been translated into no fewer than 770 of these mediums.

The whole Bible has been translated into 158 of these languages, the New Testament into 142, at least one complete book of Scripture into 422 and parts (that is, only chapters or verses), into 48.

Tremendous Difficulties. Translators of the Bible have overcome tremendous difficulties, which are little realized by the general public. Also they have brought to light many old and interesting facts concerning the complicated nature of language and the part which nature has played in limiting the mental vision of certain peoples. For instance, in translating the Bible into Eskimo it was found impossible to convey the meaning of the word "lamb" to the natives, who had never seen such an animal. So the Eskimo Bible used "baby seal," that being the nearest equivalent of the word which the natives could comprehend, an instance being, "Behold the Baby Seal of God, who taketh away the sin of the world." It is said to have taken 250 years to translate the Eskimo Bible on account of the difficulty in accurately expressing the Scripture to people who live amid perpetual snow and ice.

In China today it is necessary to publish two editions of the Scriptures, because the words used to designate the Deity could not be agreed upon. Instead of a union version, two versions of the Chinese Bible were issued, one more elegant in style, and the other more accurate in rendering. Whether one should be accepted by all the Christians is perhaps because the Chinese themselves have thought the Supreme Being too far above man to be men-

tioned excepting by suggestions, the Chinese term to be used where "God" is named in the Bible is still unsettled.

Accurate Renderings. In India there were differences which for a time looked to be irreconcilable. For instance, a literal rendering of the text, "Be thou faithful unto death and I will give thee a crown of life," was criticized by Indian pundits because they said it meant, "Be ye faithful up to, and not beyond, the point when you die." The actual version had to take this longer form, "Up to the point of giving your life remain faithful and I will give you a crown of life." This satisfied India's critics.

The hazy Ainus, an aboriginal race in Japan, are dying out, and their translation of the Scriptures is dying with them. Archdeacon Batchelor has labored for forty years among the Ainus, who, when he settled among them, had no written language. He mastered their tongue and translated the Ainu New Testament and Psalter, and now he is seeing the effect of his life-work being slowly lost through the gradual dying out of the Ainu people, practically extinct, as the people have forgotten their own speech. The new generation understands only Japanese, and Archdeacon Batchelor never speaks Ainu except when he is talking to persons more than fifty years old. The Ainu people themselves are dwindling in number and there are now fewer than 17,000 left. While the weak among them are rapidly dying

off, the strong are just as rapidly mixing with the Japanese, by whom they are being assimilated.

One of the most remarkable feats in translation was accomplished by Dr. Hiram Bingham, translator of the Marshall Islands and Gilbert Islands Bibles. Despite the paucity of the native language, which was merely a succession of guttural sounds, Dr. Bingham persevered until he had brought the Scriptures to the comprehension of the Islanders. In this case the translator literally had to create an alphabet and teach the people to read and write their own language. There have been other instances, notably in Africa, of the creation of a "talk language" out of a primitive tongue. The task is a colossal one.

Among the American Indians remarkable work has been done in Bible translation. There are about fifty and sixty linguistic stocks among the Indians north of the Mexican border. The tongues differ so radically that the language of one is unintelligible to the others. These languages are structurally so varied that they may be described as differing as widely in character as English and Russian.

Thirty-five Indian Languages. The Bible in thirty-five languages has been printed in whole or in part for the Indians. In five of these languages the whole Bible is in print, the Mohican or Massachusetts, the Dakota or Sioux, the Cree, the Eskimo of Labrador and the Tukuk-kutchin, a tribe of the northern Yukon Territory. In nine other languages the New Testament entire and in twenty-one additional languages one or more books of the Bible have appeared.

The reluctance of the Indian and his unwillingness to speak in his own language, even when he is more or less familiar with it, and his stolidity, which is so often interpreted as stupidity, are due to unsuspected Indian traits. Exactness of expression, perfection in the use of the tribal language or dialect, and a fear of errors in speech and of the same and ridicule which these bring down upon him, are the real reasons for his backwardness. It is estimated that in the last de-

cade at least one complete book of the Bible has appeared in a new language every six weeks. The British Foreign Bible Society has been the chief producer, the American Bible Society being next.

Heatless Electric Light Invented by Parisian. An engineer of Paris, M. Risler, has made a discovery which it is believed will cause a revolution in methods of illumination. At present most electric lamps use up 70 per cent. of their light. Risler has constructed a lamp which gives out light without heat. He makes use of a vacuum tube through which a phosphorescent material is passed. As soon as the electric current is passed through this a light is produced which is brighter than that of the largest lamps now in use. The consumption of energy is only 15 watts an hour in a tube six meters long and seven millimeters in diameter.

Hens Register Eggs With New Device. Hens may now "write" their own egg-laying records by means of a device recently invented. It consists of a trap nest inclosed in a sheet-iron box, 36 inches long, 14 inches wide, and 20 inches high. The recording attachment is a rubber stamp bearing the hen's name or number, which is fastened to its back by wire loops. When the hen enters the nest, the stamp rubs against the ink pad. As the hen advances a few inches farther, the stamp makes an impression on a strip of paper running up two rolls.

Cleaned. Father (whose expensive gold watch had stopped)—"I can't think what's the matter. Perhaps it needs cleaning." Henry (aged four)—"Oh, no, daddy, 'cause baby and I had it in the bath-room washing it all day yesterday."

A farmer is known by the stock he keeps.

Shadows of Stone and Lava from Mount Etna. While a large party of Italian tourists were climbing Mount Etna recently, it began throwing up large quantities of stone and lava, and the earth trembled slightly. Tourists trying to inspect the crater were driven back by violent showers of white hot stones, which were thrown 200 yards into the air.

The lava, running in a stream six yards wide, presents a magnificent sight, crawling eastward at the rate of 3,000 yards in twelve hours.

Bore on Too Heavily. The village postmaster handed back to Mr. Jones a bulky article much soiled, with the statement that it would not "go for only one stamp."

"What's the matter with it?" asked Mr. Jones. "Too heavy," said the postmaster, balancing it up his hand. "Hub, I told that boy so when he was writing it. I told him he was writing to heavy a hand, but he kept on bearing down and bearing down on the pen, like a load of hay. I'll take it back, and make him write it with a pencil. I ain't going to spend no more money just for his pishadness."

Somewhat Mixed. Ned fell out of bed one morning and tried to explain to his mother how it happened. "Mother, I think I know why I fell out of bed. It was because I slept too near where I got in!" After a little thought: "No, that wasn't it. It was because I slept too near where I fell out."



—Brooklyn Eagle.