

SECRECY OF GUN TESTS

No News to Divulge to Foreign Armies, Says Secretary of War Root.

That's Why the Public Doesn't Hear More About the Work at Sandy Hook
A New Rule, Now That We Have Some Secrets About Guns That Are Worth Having.

Nowadays very little news reaches the public about the war department's work at the Sandy Hook proving grounds, less news, in fact, than during the war with Spain, when all visitors were barred out of the coast fortifications. The reason for this is that the new secretary of war believes that foreign military experts have been profiting too much by the information they have gained of our ordnance trials through the reports in the newspapers and scientific journals, and so he has instructed officers of the army not to discuss publicly matters connected with the development of our guns, shells and explosives. The work at Sandy Hook goes on every day and some highly interesting tests of new ordnance are made, but the officers of the proving grounds keep their discoveries a secret between themselves and the ordnance department, and the only public announcements of proving-ground work are made in Washington by the war department. What little news is given out at Washington is already so well known by everybody who can profit by it that it amounts to no news at all.

The rule of secrecy was made by Secretary Root after he had read in the papers the reports of a trial at the proving ground of a new form of high explosive shell. One of the illustrated weeklies printed an illustrated story of the trial of this shell, over the signature of a member of the family of a prominent officer of the ordnance department. Before Mr. Root entered the war department such a thing would have passed unnoticed, as the illustrated journals frequently printed articles about new ordnance written by officers of the army. What information the war department had about discoveries in guns and explosives was too difficult to learn to go tell all the world about it. A short while after this Mr. Root made a visit to Sandy Hook to witness another trial of the high explosive shell. He then personally asked Major Heath, the commanding officer at the proving grounds, to see that all ordnance news was kept secret until given out directly by the war department.

Since that day not an item of information has reached the public about the proving ground tests. Major Heath, who was always glad to talk over with the newspaper men the general results of the important work going on at the Hook, now has to refuse all information. Since the secrecy rule was made the most important thing that has been done at the Hook is the making of the new high explosive, thorite, for the army in the Philippines. This explosive was recently announced in Washington, and has proved so powerful and at the same time so safe to handle that the war department has adopted it for field service as a bursting charge for shell. It is like the English lyddite which is being used in the war in South Africa. Thorite was adopted, and Dr. Tuttle, its inventor, with an officer of the artillery, was under orders to go to the Philippines to make thorite in Manila, weeks before the public knew anything about it. In fact no news of the adoption of thorite was published until long after the Manila orders had been revoked and the manufacture of the explosive had begun at Sandy Hook.

One need only to look back over the reports of the chief of ordnance and the board of ordnance and fortification to see how little care was formerly taken to keep ordnance information secret. The early reports of the ordnance fortification board were filled with detailed reports of the tests of new shells and new explosives, and any foreign government could get copies of these reports and find out everything we were doing at Sandy Hook. But these reports were not of much value to investigators abroad, for our artillerymen were not learning much of value then. They were only going over the work that had already been done by the armies of Europe. About all we learned then was that the new devices we had were failures. We burst gun after gun, trying to devise a safe way of throwing nitrogelatin and other highly sensitive destroyers. Chemists brought forward various explosives, promising of being of value, but nearly all of them failed at critical moments.

Now it is different. Last summer

Major Heath's experiments with high explosives came to something. The compound prepared by Dr. Tuttle of Tacoma did remarkable things—went through battleship armor without exploding when it wasn't intended that it should explode, and then tore things to smithereens when it was fired in a fused shell. It always did what was wanted of it. That's the kind of high explosive the government has been looking for all these years, and how that it appears that one has been found the secretary of war doesn't want the powder makers abroad to find out how it is made. And so it is with the Isham shell. All the high explosive shells fired at Sandy Hook heretofore have been about as dangerous to the men behind the guns as the imaginary enemy in front of them. But this invention of the Burlington engineer has been as safe to handle as an ordinary shell, although it carries enough nitrogelatin to send a battleship to kingdom come at one swoop. So far as we know, no foreign army has such a wonderful destroyer, and Secretary Root wants to keep the invention for this country. Naturally when our ordnance experts are reaching results of real value, it's no time to tell our neighbors across the ocean all about it.

While we are keeping our new knowledge about artillery to ourselves we are finding out what they are doing abroad. For example, the ordnance department has been putting around with old field guns for several years, trying to make a field gun that will do as well as the French guns the Boers are using and the English guns that have been shipped to the Transvaal for England's use and to the Philippines for our own army. In this matter of modern artillery our army is woefully behind the times. Before the English-made mountain guns were shipped to Manila this fall we hadn't a respectable piece of field artillery in the Philippines for the reason that the ordnance department had none to send. Secretary Root, when he found out the wretched condition of our field artillery, ordered guns from England and at once, somewhat to the chagrin of the officers in the ordnance department. Within a few days the department has received from abroad confidential information regarding the making of modern field guns abroad. The information has been collected by American officers at the Krupp works in Germany, the French gun factory at Canet and from the English gun makers. This matter of supplying our artillery with guns equal to those used abroad has been thoroughly stirred up by the new war secretary, and it will not be long before American gun makers will be turning out rapid-fire high-power field guns as good as, if not better than, the foreign guns.

Officers of the army, it may be said, do not all agree with the secretary of war that any good is done by preserving secrecy about the general results of the tests of new ordnance. Some officers hold that the more foreign governments know about the strength of our own army the more reluctant will they be to enter into conflict with us. This was the idea American artillery officers had in mind in the spring of 1898, when they let the public know how strong our coast defense was. The general impression abroad was that all of our seacoast towns were a mercy of any hostile fleet which might raid the Atlantic coast. The newspapers at the time were allowed to get detailed information of the number and strength of the guns at Sandy Hook, Fort Hamilton, Fort Wadsworth, and the other coast fortifications, in order to let Spain know that our coast was impregnable. On the other hand, artillery officers say that try as you will, you cannot keep military information secret. It leaks out somehow. The foreign military attaches in touch with everything that goes on here, while American army officers abroad are not slow to find out what military progress is being made in England, France, Germany and Russia.

The navy department freely publishes what goes on at Indian Head, the proving ground for the navy. News of the tests of new battleship armor, new guns, new explosives and the like reaches the newspapers very regularly.

county and was as first used as a title nobility in the reign of Henry VI. And, lastly, the baron. This is the oldest form of peer.

The first three grades have the right to bestow on their eldest sons their second title, but this does not make them peers, as the title is only held by courtesy. In each case the eldest sons of all peers rank with the grade next below their fathers in dignity. There have been a few isolated cases of sons becoming peers during the lifetime of their fathers, as witness in this century creation of the title Baron Dover during the lifetime of the father, Viscount Clifton, but these are extremely rare.

As to the precedence in England, it is roughly this: First, the archbishop of Canterbury, next the lord high chancellor, next the archbishop of York, lord high treasurer, the lord privy seal, then dukes of England, dukes of Scotland, created before the union; then dukes of Great Britain, those created since the union with Scotland; dukes of the United Kingdom and dukes of Ireland, created since the act of union between England and Ireland; then eldest sons of dukes of the blood royal, then marquises, the same order of precedence

PEERS AND THEIR RIGHTS

Five Grades of English Nobility, from Duke to Baron.

The duke of Manchester, who is at present on the staff of the New York Journal, contributes the following to that paper:

It has been suggested to me that a short article on the British peerage might prove interesting to some. I do not intend to make this a very serious article or to deal with it in any way at all in a scientific light, but merely to give a few facts which I hope may prove of interest.

There are five grades of the peerage now in Great Britain, which I will name according to rank.

First, the duke, or, from the Latin, dux, or leader.

Second, the marquis, or guardian of the marchers or frontiers.

Third, the earl, from the old Saxon, eorlman, or chief of thanes.

Fourth, the viscount, or vice-comes, which formerly meant sheriff of a

as dukes; then dukes' eldest sons, and so on through the different grades, youngest sons of the dukes of the blood royal ranking after earls and bishops ranking before barons.

All peers above the rank of baron are designated by the sovereign officially as "cousins." This arose from the fact that Henry VI. being really related to every earl and nobleman of high rank in the kingdom, through his wife, mother or his sisters.

Viscounts are called "right trusty and well beloved cousin."

Marquises are called "right trusty and entirely beloved cousin."

Dukes are called "right trusty and right entirely beloved cousin."

A peer has a certain number of privileges, some of which, however, he scarcely ever makes use of. He is free from arrest in all civil actions, and in such can not be outlawed; he is exempt from serving on juries; from taking his turn as sheriff, and, in case of riot, the posse comitatus, or sheriff's posse, as called in America. He is tried in case of treason and felony by other peers. And suppose he should be condemned to capital punishment, he can be beheaded instead of being hanged.

A peer gives his judgment not on oath but on honor. Libel against a peer is a far, theoretically, more serious offense than against other people and anyone committing this offense can be tried for what is called scandalum magnatum. But this is practically obsolete.

Peers have the privilege of sitting covered in courts of justice, and on the bench. Baron Kingsdale, may remain covered in the presence of royalty. Peers have the privilege in parliament of wearing parliamentary robes, a scarlet cloth, with bars of ermine on the shoulders, the different grades. These, however, are worn on very few occasions. For instance, when one is being created a peer he and his two sponsors, or introducers, both wear them; also when serving as lord commissioner of the queen, in the house of lords and on other great occasions such as coronations and royal funerals.

The eldest son of a peer immediately on the death of his father becomes a peer and as such is eligible, whatever his age, to sit in the house of lords on the custom is that he should not take his seat until he has attained the age of 21 years. The procedure in the case of a peer taking his seat or inheriting a title is entirely different from the case of a peer taking his seat on the creation of a title. On inheriting all he has to do to establish his right of succession by producing his father's and mother's marriage certificate and his own birth certificate together with a letter from one of his male of kin testifying that he is the person designated in these documents and on their being passed he simply subscribes to the roll, which is at the door of the house, wherever it is sitting, and walks in.

In the case of creation the proceedings are very elaborate. He obtains two sponsors, peers of the rank of his new creation, and the three, dressed in their different parliamentary robes present themselves before the bar of the house with great ceremony and much bowing. Five lords commissioner, also dressed in parliamentary robes and usually among them the lord chancellor, preside over the house. The patent of the peer's new creation is read aloud and also the oath of allegiance to the queen in justice is read aloud and signed before the whole house, and then he is formally conducted to his seat.

BATTLE PRECAUTIONS.

How Killed and Wounded British Soldiers Are Identified.

The names of the British killed and wounded after a battle are ascertained by means of the identification card, which all our soldiers carry sewn up in the left-hand corner of their khaki tunics.

On this card is written the soldier's name, rank, regimental number, together with the name and address of his next of kin. The latter is added so that the authorities may know where to forward the effects of any soldier who gets killed.

After an engagement the roll is called as soon as the regiments get back to camp. Every man who does not answer is "ticked off" as missing, and search is made for him on the field.

As the search parties come across the dead and wounded men they rip open the tunic at the left-hand corner and take out the identification card. The cards thus collected are carried back to camp and handed over to the clerks of the general in command, who therefrom compile the casualty lists. After all the cards have been collected the roll is checked again, and a note made of those men of whom no trace has been discovered. These are usually presumed to have been taken prisoners, but it does not always follow that the assumption is correct.

In the corner of this tunic, opposite the identification card, every soldier carries a small pad of bandages, etc., for dressing a wound. The "field dressing," as it is called, is added to "Tommy's" equipment in order that he may be his own surgeon until medical assistance arrives, or may have the wherewithal to bind up the wound of a chum.

You will probably be surprised to learn that one of the last things "Tommy" does when ordered to the front is to make his will, although every regiment contains a per centage of happy-go-lucky fellows who do not worry themselves about what will become of their property when they no longer require it.—London Mail.

COMPLETE.

Harduppe—You advertise that you buy books. What'll you give me for this one?

Dealer—We don't want anything less than a whole library.

Harduppe—Well, this is my whole library.—Philadelphia Press.

MERELY A HINT.

He (as the clock strikes 12)—This is the hour that graveyards yawn.

She—Well, they have my sympathy.

NECROLOGY.

Some of the Great Men Who Passed Away During the Last Twelve Months.

- JANUARY.
- Hon. Nelson Dingley, author of the war revenue bill, at Washington.
 - John Russell young, librarian of congress, at Washington.
 - Ex-Attorney General Garland, at Washington.
- FEBRUARY.
- Col. J. A. Sexton, commander-in-chief of the Grand Army of the Republic, at Washington.
 - Prince Alfred, grandson of Queen Victoria, Count von Caprivi, ex-Chancellor of the German Empire.
 - M. Felix Faure, president of France, of apoplexy, at Paris.
 - Lewis Miller, joint founder of the Chautauqua movement, at Akron, O.
- MARCH.
- Baron Herschel, member of the joint high commission, at Washington.
 - Princess Kianlun, at Honolulu.
 - Ex-Senator Patrick Walsh, at Augusta, Georgia, Prof. O. C. Marsh, the geologist of Yale, at New Haven.
- APRIL.
- Rear Admiral C. C. Carpenter, in Boston.
 - Judge Stephen J. Field, retired justice of the supreme court, at Washington.
- MAY.
- Hon. Roswell P. Flower, of New York; heart disease.
 - Emilio Castelar, Spanish statesman, at Murcia.
 - Rosa Bonheur, the French animal painter, at Fontainebleau.
- JUNE.
- Gov. William H. Ellerbe, of South Carolina, of consumption.
 - Johann Strauss composer of the "Blue Danube," at Vienna.
 - Frank Thompson, president of the Pennsylvania Railroad, at Philadelphia.
 - Augustin Daly, American manager and playwright, at Paris.
 - Congressman R. P. Bland, at his Missouri home.
 - Henry B. Plant, of the Plant Railroad and steamship system, at New York.
 - Mrs. E. D. E. N. Southworth, the novelist, at Washington.
- JULY.
- Maj. Gen. H. C. Wright, United States army, at Washington.
 - Bishop John T. Newman, of the Methodist Episcopal church, at Saratoga.
 - Robert Bonner, proprietor of the New York Ledger, in New York City.
 - Grand Duke George, heir apparent to the Russian throne.
 - Col. William Preston Johnson, president of Tulane University.
 - Col. Robert G. Ingersoll, at Dobbs Ferry, New York.
 - Rev. Dr. Thomas J. Sawyer, Uni-

Bullets of Various Kinds.

Powder has spoken. It rests with that agent now to put an end to the Anglo-Boer conflict. A signature of blood will alone settle the proposed suggestion to intervene.

One can only deplore this struggle which brings into play so many human lives and destroys so many lives. If it causes joy to the monstrous but happily scarce apologists of war, under the allacious pretext that wars are regenerative, it plunges into consternation and too often into mourning those who do not think men were created to destroy one another "Love one another," says the Bible, and the majority observe this maxim. Unfortunately complicated cases sometimes arise which, like the Gordian knot, can only be unraveled with the sword. Happy those whose excuse is that they are subjected to these situations and do not create them.

However, one should not paint too gloomy a picture of war as it is waged today. Progress has ever been made in the art, if not of killing, at least of wounding and mutilating our fellow man. One might even say that a certain refinement has been introduced in the means of putting the enemy in the impossibility of bearing arms against us. And it is a race between civilized nations as to which will succeed quickest in annihilating the action of the armies that may be opposed to it.

Each people seeks to do better than its neighbor. It is a constant tendency, a regular game with a record to beat. In 1866 the Germans held the record with the needle gun, but this record has often been beaten since. In 1870 they held the record for superiority in numbers, thanks to which France was suddenly invaded.

In the days of Napoleon victory was largely a matter of speed. So it may be said that the great captain won his battles with his soldiers' legs. Today, when railways have made the concentration of troops rapid and easy, the god of battles does not favor as much as at the beginning of the century those who arrive first on the field of action. And this because a new factor has made its appearance—the rapidity, precision and efficiency of fire.

The victors of Ansterlitz, Jena and Wagram were only armed with rudimentary flint guns, the smooth bores of which took only a round leaden bullet, carrying from sixty to eighty metres.

And, even then, rain had only to fall during the battle to silence their weapons, since, if the powder in the pans were wet it would not light by the spark from the flint. As for the cannon, they discharged solid shot and bombs, but not to any great distance.

As troops approached very near to each other, and there was nearly always hand to hand fighting, these weap-

versalist divine and author, in Boston.

Gen. Ulisse Heureaux, assassinated at Moca, Santo Domingo.

Gen. Guzman Blanco, ex-President of Venezuela, at Paris.

AUGUST.

Ex-Gov. W. Y. Atkinson, of Georgia, at Newman.

Prof. R. W. E. Bunsen, the German chemist.

Ex-Judge Henry Hilton, at Saratoga.

SEPTEMBER.

John Y. McKane, at Sheephead Bay.

Rear Admiral Henry H. Pickering, of the Boston navy yard, at Boston.

James B. Eustis, former Ambassador to France, at Newport.

Cornelius Vanderbilt, at New York.

John Sleeper Clarke, tragedian, at Surbiton-on-the-Thames, England.

OCTOBER.

Baron Thomas Henry Farrar, financial writer, Lorenzo Dow, inventor and reformer.

Vice Admiral Philip Howard Colbourn, of the British navy.

Charlotte, sister of Heinrich Heine, the German poet, Maj. Russell Sturgis, Y. M. C. A. lecturer, at Boston.

Lawrence Gronlund, socialist writer.

Prof. Edmund Orton, eminent geologist, at Columbus, O.

Joseph Wood, said to be the oldest locomotive engineer in the United States.

William Henry Appleton, the New York publisher.

Gen. Symons, a prisoner at Dundee, Grant Allen, author in England.

Brig. Gen. Guy V. Henry, at New York.

NOVEMBER.

Maj. John A. Logan, killed in battle at San Fabian, Luzon.

Vice President Garrett A. Hobart, at his home in Paterson, N. J.

Thomas Henry Ismay, founder of the White Star line of steamers at Liverpool.

DECEMBER.

John I. Blair, railway magnate, at Blairstown, N. J.

Senator M. L. Hayward, at Nebraska City, Neb.

Maj. Gen. Henry W. Lawton, in an attack on San Mateo.

Duke of Westminster, at Cranborne, Dorsetshire, Rev. Dwight L. Moody, at East Northfield, Mass.

Rt. Hon. Harry Escomb, ex-Premier of Natal, at Durban.

Charles E. Fike, one of the founders of the republican party, at St. Paul, Minnesota.

Rev. Dr. Thomas J. Sawyer, Uni-

What every one sought then was to kill his adversary. The fighting did not take place far enough away for its object to be merely to put him hors de combat.

The big bullets from the muskets smashed the bones and shattered the skull; the cannon balls and large fragments of shells disemboweled men and caused extensive mutilations—all mortal wounds. Under the conditions, it is not surprising that, in spite of the prodigies performed by Larrey, Sancerettes and Desgenettes, the sanitary service should have seemed rudimentary.

What appears from a study of the wars of the time of Napoleon is, on the one hand, the importance given to a rapid occupation of the field of battle and the destruction of the enemy, and, on the other hand, the comparative imperfection of the weapons used and the secondary part played by the wounded.

After a hundred years nearly all the conditions which govern the art of war are changed. Hand-to-hand fighting is a mere accident, engagements begin at a distance of several kilometres, and with weapons so perfect that the two sides hit without seeing each other, and generally produce wounds sufficient to stop a man's advance and put him hors de combat without seriously endangering his life.

For the last twenty years ballistics have progressed continuously, and firearms have undergone, and are continually undergoing, fresh improvements. The modern weapon at once more complicated in its structure and more simple in its use, has the enormous advantage over the old of a more powerful fire and more rapid, more simple, more sure and more rapid, which require of the shooter a minimum of instruction and effort.

Properties have been fitted with a metal casing which enables them to be made longer. The use of the smokeless powders of great explosive power has extended. Lastly, as a consequence of recent researches, it has been possible to reduce the caliber of weapons, thus reducing the weight of the rifle and projectiles to a minimum and consequently enabling each marksman to carry a larger number of cartridges.

It is sufficient now to shoot straight in front of one to be a practically useful marksman. As far back as at Saint-Privat in 1870 men were shot at 1000 metres, and in 1878 at Plevna the Turks though very inexperienced, opened fire at distances of 1500 and 2000 metres. At the present time 1500 metres is no longer a great distance, but a normal firing distance, especially in defence. The perforating power is such that it is manifested far beyond 2000 metres. The zone of injurious effects has been much extended, and osseous contusions may

still be observed at 3000 and 400 metres.

At a distance of 2000 metres an 8mm. bullet has still force enough to pass through a front rank man and wound the man in his rear when troops are drawn up two deep. At the average fighting distance two or three men may be wounded by the same bullet. At that short distance, without saying anything of the greater thickness now given to works of fortification on the battlefield, a single projectile would have force enough to go through four, five or six men. Thus, in Dahomey, it was observed that a bullet, after penetrating a tree forty-five centimetres in thickness, still went through five men.

These are astonishing facts which will not be seen in reality as often as some people say. For this to be the case it would be necessary not only that the bullet should undergo no deviation, after having passed through the first obstacle, a thing which always happens at least after the second, but also that its point should not be deformed. Now Lagarde's experiments have proved that this happens in half the number of shots.

These observations may therefore be rightly relegated to the domain of the fabulous when they speak of more than two men—which is indeed quite enough—being pierced by the same bullet.

By their reduced caliber and diminished weight modern bullets present more favorable conditions, from a surgical point of view, than the old. They are only dangerous through their force, their initial velocity and their flatter trajectory. Every one knows that the trajectory is the curved line followed by the projectile in the air.

If the bullet, on leaving the rifle barrel, were exposed only to the force which projects it, it would follow its initial direction indefinitely, affected by gravitation, it tends more and more to approach the earth. The dangerous zone of a trajectory is the length of ground on which a man cannot remain without being struck by a projectile following that trajectory.

WHERE A GREAT EXILE DIED.
People of St. Helena Are Happy and Crime is Almost Unknown.

Few people even think of St. Helena except as a rock in the season which Napoleon lived a while miserably and then miserably died, says the New York Times. That the greatest of an island's history is hard to realize, because a poet or romancer would have made it the end, and a continuation is therefore more or less unnatural and absurd. Be that as it may, St. Helena as remained the abiding place of ordinary human beings who concern themselves very little about the colossal ghost generally supposed to be the island's only inhabitant, and the report to the English government just made by their governor shows exactly like those of the folks dwelling in places as tragically famous. For instance, the revenues of the island last year were 1154 pounds, a decidedly comfortable sum, but, alas! the expenditures mounted to 12,340 pounds, and that is in excess of outgo not comfortable at all. The governor says, however, that he had balance was due to some extraordinary drains upon the island's resources, and he anticipates a substantial surplus for the current year. A recent increase of the garrison and extensive improvements now making by the colonial and imperial authorities assure the immediate prosperity of the islanders.

St. Helena has no public debt, but is paying off by small annual installments a non-interest bearing grant of 5,000 pounds made by parliament in 1871. The imports, chiefly foodstuffs and building materials, amounting last year to 62,985 pounds, and the exports, almost wholly potatoes, to 4,391 pounds. Lacemaking has been introduced among the girls of the island with great success, and the governor is experimenting with the manufacture of brick and tile. The whalers have now entirely deserted St. Helena, the few ships engaged in that industry keeping far to the north or south. The total population of the island is 4,543.

The governor hopes that winter visitors from England may be tempted by the salubrity of the climate to try St. Helena, which is superior, he says, in some respects to that of Madeira and the Canary islands. He says the people as a whole compare favorably with the English agricultural population; with few exceptions all can read and write, and the language is spoken with greater purity than in many districts at home. As a rule, the people are happy and contented, with little crime among them and much kindness in helping each other. Strangers are greatly impressed with the general civility to them by old and young.

QUESTIONS AND ANSWERS.

An inspector, well known for his weight, was trying to extract the word "flesh" from a class. His efforts had failed, but, taking hold of his fat cheek between his thumb and forefinger, he pulled it out, and asked:

"What's this?"

"The unhesitating answer came promptly: 'Pork, sir.'"

The same inspector was once giving an object lesson on an umbrella. To illustrate his subject he took his own silk umbrella, which happened to have a small hole in it.

"What is this, boys?"

"An umbrella, sir."

"And what is this?"

"The stick, sir."

"And these?"

"The ribs, sir."

"With what is it covered?"

"Silence."

"Surely you know. What kind of an umbrella would you call it?"

"An old 'em, sir."

CUPID IN A HUFF.

"Our engagement is off again."

"What's the matter now?"

"I gave her a belt buckle with my photograph on it, and she uses it to fasten her dog's collar."—Chicago Record.

As a stock raising country, Venezuela could supply the world with beef were the grazing facilities utilized.