HORRORS OF THE COMING WAR

Washington, D. C.—(Special.)—Every lover of peace and progress will hope that the conference at The Hague of the trusted representatives of the civilized nations of the world will result in tangible and lasting improvement of the sad condition of affairs with which we are all so familiar. The conference discusses three main lines of improvements: First, the diminishing of armaments; secondly, the conduct of war on more humane lines than has hitherto been the case; and thirdly, the creation of courts of arbitration for the settlement of international quarrels. If the men and women who are weighted with the intolerable burdens of "armed peace" were to more fully realize the incalculable waste which the existing military system imposes on them they would cry halt to the economic ruin of their country. It is appalling to hear that in the event of a war between the dual and triple alliance 15,000,000 armed men would be set in motion, whose daily expense would be $20,000,000.

The book which is stated to have been the immediate cause of the meeting to bring about the universal peace shows plainly the awful effect of a future great war. The author is Johann von Bloch, a Russian high official, who has had access to the Russian ministries of war and marine, and has evidently been permitted to give publicity to the valuable statistics and other material which have been unreservedly placed at his disposal. For eight years M. von Bloch worked at his task, and six thick volumes crammed with all manner of detail as to the art and conduct of war, and the effects of modern war on the nations conducting it, are the result of his labors. His dry, scientific method of marshaling his facts and figures, his freedom emotion and passion, are as convincing in their way as the perfervid appeals to our Christian and moral feelings which we are in the habit of hearing from the emissaries of the peace societies.

M. von Bloch begins his work with an elaborate inquiry into the carrying powers of modern infantry projectiles and the development of modern rifles and explosives. He explains the complete revolution which he reveals is a terrible tribute to the diabolical ingenuity of the human mind. Let us look at what the revolution means, using, for convenience, the European measure, a metre being 3.3 feet, a millimetre 0394 inches. Owing to the high trajectory of the old rifles, it was possible to have clear space free of danger between the marksman and the object aimed at, but the frightful swiftness of the newest projectile almost abolished trajectory, so that nothing the height of a man can escape until it has reached a distance of 600 metres from the rifle's mouth.

And invention in this direction has not had its last word. Experiments are now being made with a five-millimetre bore rifle, the bullet of which will not rise much more than five feet from the ground until it has reached a distance of 1,100 metres. In 1870, during the Franco-German war, the bullets of the chassepot and needle guns were unable to pierce a human skull at the distance of 800 meters; the modern rifles accomplish this at a distance exceeding 2,000 meters. At the distance of 100 meters the bullet of the modern German rifle pierces 39 inches of dry pine wood, which is reckoned as equivalent to five men standing one behind the other.

Another factor which will make the wars of the future still more terrible is the use of smokeless powder. M. von Bloch shows that the introduction of this explosive will transform the conduct of war in the field. Formerly the clouds of smoke marked the position of the enemy. In future wars his whereabouts will only be known approximately by the direction from which the sound of the firing comes, and as volley firing cannot heard clearly at a mile's distance, it follows that a detachment of soldiers may be involved in the greatest danger without knowing in what direction the perils lies. And it will be remembered that formerly the smoke of battle hid part of the horror of battle.

The author of this work on the war of the future gives special consideration to an examination of that terrible new engine of destruction—the small-bore rifle. The most modern of these devilish weapons will fire 78 shots a minute. A bore of five millimetres is quite common at the present time, but efforts are being made to reduce the bore to four and eventually to three millimeters. The five-millimeter rifle has so small a cartridge that the ordinary infantry soldier can carry 270 of them. During the Russian-Turkish war the full complement was 84. If the bore is still further reduced, it will enable the infantryman to carry 575 cartridges. That is to say, he will be able to fire seven times as many shots as the soldier of twenty years ago, before he requires to have his cartridge case replenished. Taking all these points into consideration, low trajectory, and swiftness, smokeless powder, quick-firing, and the ability to carry about a larger supply of ammunition than formerly, M. von Bloch estimates that the new rifle which will be used in the war of the future is forty times more deadly than the German needle gun of 1870.

And what does this mean from the point of view of the national economist. It means that among inventors there will be feverish exertions to reach some degree of finality as to bore and projectile, and that as soon as this is reached the European powers will rearm their infantry at a cost of $700,000,000. Fom the point of view of the military strategist, it means that the perfection of weapons will enable the contending armies to produce so intense a fire that they will mutually destroy one another.

In the same way M. von Bloch demonstrates the effect of the artillery of the future. The use of improved steel in the manufacture of cannon enables the modern heavy gun to be fired with an explosive four times as powerful as that of 1870. In 1870 a shell burst into 19 to 30 fragments. The shells which will be used, should a European war break out in the future, will burst into 240 fragments. Shrapnel formerly burst into 37 fragments; now into 340. The old bomb, filled with about two-thirds of a pound of gunpowder (ordinary) produced 42 fragments; the same bomb filled with pyroxilian is shattered into 1,204 splinters, and every one of these splinters is driven with a far greater force and to a longer distance than was formerly the case. In 1870 a bursting bomb was deadly only in the immediate neighborhood of the point where it burst. The splinters of a modern shell fired at a distance of 3,000 yards deal death and destruction within a circumference of 1,200 yards.

No more terrible writing can be imagined than that in which M. von Bloch attempts to describe the battles of the future. He demonstrates that in all of those cases where the opposing forces are approximately equal in strength and where neither of them has any special advantage of position, the issue of the battle cannot be decided without awful slaughter. M. von Bloch, however, is perfectly convincing in what he says about the duration of the battles of the future. Hitherto it has rarely happened that a great battle has lasted longer than one day. In the future a battle lasting three or four days will be the rule. The reasons are obvious. All the elements of future battles are so absolutely unknown. They will be carried on by colossal bodies of troops over vast areas of ground. There will be strategies and counter strategies. Artillery may be in action for two days, and the opposing forces still be invisible to one another. And finally the science of field fortification has been so developed that an army defending its position will have a great advantage over the attacking force and be able to prolong the defense indefinitely.

The Scout's Occupation Gone.

The most pitiably cheerless men in the west today are those who have given the greater part of their lives to scouting for the army, and occasionally for a cattle company or a band of miners, who have endured a generation of savage hardships and have braved all the dangers of the plains,and now, grizzled and gray, realize that their occupation is gone forever.

There are scores of old fellows in the territories. Several hundred of the younger scouts have become vaqueros, sheep herders, express messengers and guards, cattlemen, railroad men, miners and prospectors. Electricity and railroads principally have made scouting obsolete, and since the Apaches in the southwest and the Sioux in the northwest have been beaten into peaceful relations with the white settlers there has been no demand for the services of the old-time scout. In every town of any size in the west one may see some of the veteran scouts—poor in purse, tattered in person—loafing about the saloons, telling visiotrs from the east of the glories of the frontier before civilization and railroads spoiled it all, and half-heartedly building hopes of the day when something unexpected may transpire and scouting be called into demand again.

Like the knight in the band of Richard the Lion Heart, who thanked God he was not a clerk, the true scout of the western plains has few, if any, counterparts. Along with the rangers of Texas he is one of America's most characteristic and picturesque types. It is hard in these days to realize how great a part the scouts of the '40s and '50s played in the settlement and civilization of the plains and the Pacific coast.

The earlier scouts, like Kit Carson and Jim Bridger, were originally trappers and hunters, born and reared in Missouri, Tennessee and Kentucky,who had a fondness for adventure. They had pushed their way across the border of civilization and had gone upon the plains of Kansas, Nebraska and Texas for big game and excitement. The Mexican war of 1847 and the movement of troops through Texas and on the Rio Grande brought scouting into the army service. When the era of ox teams and excited gold seekers headed toward California began in 1849 there was a great demand for scouts at very profitable wages. Hundreds of young men with a smattering of plains life, an expertness in firearms and a little knowledge of Indian ways, became professional scouts.

No emigrant train would leave St. Joseph, Mo., or Leavenworth, Kan., on its journey of four or five months to the Pacific ocean without an accompanying scout or guide for at least a part of the way. As the chain of army garrisons was extended out upon the plains the war department employed more and more scouts for the troops, and scouting became a sort of science of the plains, in which there was competition in experience. During the Apache and Sioux wars in 1877, 1878 and 1879 the government had about 1,800 scouts on the army pay rolls.

"Catty" is still a weight in use in the treaty ports of China. When the Chinese first sold tea to the Europeans they inclosed it in little lacquer cases which each weighed a "catty" and in due time were called tea catties, and at last tea caddies.

AGRICULTURAL.

MIDSUMMER WEED DESTRUCTION

Geo. O. Turner, Hastngs, Neb.: To eradicate cockleburrs and other weeds I would take a good sharp plow with counter and chain, or hook, on same; plow the ground about four inches deep and sow to barley or oats. Then I would plow again and sow to winter wheat for two or three years in succession, plowing early each time. You cannot kill them with a corn crop.

"Zeb," Eldorado, Kan.: I do not know of any easier way to eradicate cockleburrs, etc., than to put your ground in wheat, rye or oats for two years. Plow in July; a harrow will do the rest. Millet would do if you could use so much hay. It is that or pull them befor they ripen their seed, which contains more back ache than most western farmers enjoy.

Edwin Snyder, Oskaloosa, Kan.: Midsummer destruction of weeds is an important subject. A little neglect now means the seeding of the ground for perhaps several successive crops. The earth is said to be the natural mother of weeds and the stepmother of useful plants, and seems to manifest a natural mother's solicitude for her offspring, and only the foster mother's affection for the useful plants, which causes the farmer constant, anxious care.

In the infancy of the human race a handful of savages had their few simple wants spontaneously supplied by the spontaneous productions of the earth, and on a few tropical islands a sparse population is still enabled to exist without regular systematic work.

A very large part of the farmer's work in the growing season must necessarily be devoted to the destruction of weeds, in order to protect the growing crops.

"From early morn to dewey eve" the warfare must go on or the harvest will be small or a total failure.

The average farmer looks upon weeds as a wholly useless and unnecessary element in the economy of nature.

Nothing grows in vain. I believe that if all the weeds and so-called useless plants could be entirely exterminated the earth would soon become a barren waste. Barrenness begets itself. If a piece of land could be kept entirely free of all growing vegetation and submitted to the burning sun and wasting rains it would soon become entirely free of all growing vegetation, and absolutely unproductive. The spontaneous production of weeds is one of the wise provisions in the economy of nature for the preservation of the fertility of the soil. Yet, not only are they not needed, where growing crops occupy the ground, but they are fatal if left unchecked, and the good farmer is in constant warfare to hold them in check.

It is a hundred times easier to kill young weeds than after they have attained considerable growth. If fields could be given a light cultivation after each rain weeds would never trouble, but that is impossible in seasons like this, when continuous rains keep the farmers out of the fields for ten days at a time. Midsummer, then, finds our fields luxuriant with an almost tropical growth of weeds.

Hoeing is a slow, laborious process, but an absolute necessity to rid the fields of the rampant growing sunflowers, horse weeds and cockleburrs. It is too much work to undertake to clean out crab grass and smaller weeds with a hoe. I always, every season, go through my corn field with the hoe, in July or August, and cut out cockleburrs and other coarse weeds. It is the only effectual way of getting rid of them. My pastures I always mow in August, to kill ragweed and the like, which spring up where stock is kept.

I consider the mowing machine and scythe indispensable in the midsummer battle with the weeds. The trim appearance of the pasture after the mowing pays in looks if nothing else, I sow grass seed and clover seed in the spring without any so-called nurse crop. The midsummer mowing of this is a necessity to prevent the weeds from choking out the tender plants.

Upon the whole I am glad weeds grow. If they did not we would certainly have no useful plants. Their extermination necessitates a careful cultivation of growing crops. Their growth upon waste places does no harm but holds the fertility of the soil for future useful crops.

Artemus Paul, Luce, Neb.: I suppose that the question of weed destruction is intended to apply to those varieties of weeds which do not yield readily to the ordinary methods of cultivation. The worst and most common weed of that kind which we have in this country is the wild sunflower, which is a very rapid grower and soon becomes so firmly rooted that the corn cultivator will not take it out. I have had twenty years' experience farming in this county, and have never had a badly infested field. I find that when the fields are once free from these weeds it is not difficult to keep them so. I have a farm of 320 acres to look after, and I find that one day's work of ten hours in each year is sufficient to destroy all the sunflowers which have come from seed that has drifted in or have been transported from adjoining farms. They should be cut close to the ground when in blossom with a sharp scythe or corn knife. Fields may sometimes be seen in which the crop of small grain is smothered and rendered worthless by the dense growth of sunflowers. With such a field the weeds should be cut with a mower when in blossom, and when dry should be raked and burned to get them out of the way. The ground should be stirred with the disc harrow in the fall or early spring, so that all seeds lying on the surface may be covered by the soil and germinate early in the spring. The ground should be plowed some time in May, which will destroy the young plants, when corn or some other cultivated crop should be planted on the ground. It is my experience that sunflowers growing in the draws on the unbroken prairie will disappear when the ground is fenced and pastured with cattle. Cattle do not like these weeds as a steady diet, but a limited number of the tender heads will be eaten with a great relish.

W. M. Settles, St. Paul, Neb.: This is a very important subject and interests every farmer of the west where corn is grown extensively. The cockleburr has not got much of a hold in this part, as yet, but there are some farmers who have them. When I bought my farm six years ago, it was fairly well seeded with them, but I told my neighbors I would clean the farm in three years, and so I did, to their surprise. I tell you they are a hard weed to fight. I used every possible means to get the advantage of them, and with dry years to help me I have a clean farm now. I had to pull them all out of the corn and stubble after harvest each year, and I go over the farm yet in search of them. Wild morning glories, sunflowers and sand burrs can be kill by early afll plowing, say as soon after harvest as possible, if fall plowing is all right for the crop which will follow. In these parts it seems that we have too much wind; our soil blows away when real dry. If put to rye it does all right. Rye pays very well most years, but this year our rye winter killed, as also did the winter wheat. One should mow the road, the fence line and odd corners about the premises after harvest. I like to see a farm clean and neatly fixed, but they are few and far between in this country. It seems that most of the farmers strike for town as soon as they have a few spare moments, which gives the weeds somewhat the advantage of the farmer, for a farmer cannot do very much running to town and farm many acres in the crop growing time.—Homestead.

New Rural Mail System.

The United States postoffice department has officially adopted and commenced to operate a postal wagon, which is intended to replace the majority of the star route postoffices in the United States. The star route offices are those of the fourth class and the postmasters in charge of these have been paid a percentage on the postal business transacted. As fast as possible these wagons will be introduced throughout the United States. Each state will be divided into circuits, these circuits being of the length that a wagon can cover in a day. The postal clerks in charge of these wagons issue money orders, register letters and transact a general mail business. The mail is delivered either at the houses of the people along the route or placed in what is called a rural free delivery box near a residence. The postal clerk has one key to this box and the occupants of the residence the other. In this way the postoffice coms to the people instead of their going to the postoffice.

The inventor of this postoffice wagon is Edwin W. Shriver of Westminster, Md., who was for years a purser on the Iron steamboat line between New York and Long Branch. Mr. Shriver has been appointed postal clerk of the wagon which pegan operations last Monday.

It is estimated by the postoffice department that about 40,000 of the minor rural postoffices will be done away with by the use of these wagons.

Compiling a Dictionary.

Nearly everyone has had the bright idea that it must be a tremendous lot of work to get up a dictionary, but few have any notion of the real size of the task. When Johnson got his famous dictionary started he calculated that, with six assistants, he could complete the task in three years. It took him nine years instead. He received the small recompense of $7,500, and had to pay his assistants out of that.

Webster worked 34 years before his dictionary made its bow to the world. Webster was very punctilious in his definitions, and so painstaking that it was a wonder he completed the work when he did.

The words which give the compiler of a dictionary the most trouble are the little one-syllable Saxon words. Their history extends back into the Saxon period, and their meaning has become twisted in many directions. Words with pedigrees are the hardest to trace.

When a new dictionary is projected one man is selected as editor-in-chief and he appoints his subeditors. Then appeals are sent out to literary people in general for voluntary contributions in the nature of rare and curious words. There are over 1,000 people who have offered their services in the case of a dictionary now making. These words, written on slips of paper, are filed in thousands of pigeon holes. Over six tons of clips have been put away. This means 6,000,000 words, but only 1,000 will be printed. The amount of work necessary to properly sort these is evident.

A Presbyterian clergyman, it is said, has been experimenting by working in mines, foundries and brickyards. He announces his conclusion that "if candidates for the ministry would work for a year among those who toil with their hands, they would be better able to fill the pews in their churches with working men."

SHORT STORIES.

INDIAN TORTURED.

This is the story told by "Doc Obija," a reliable Navajo Indian, of the horrible tortures his tribe inflicted on Bine Nimalgo, medicine man and sorcerer:

"When the spot sickness (smallpox) came upon the Navajos they knew that there was magic. That was why our men were dying and our young women's faces were pitted.

"Bine Nimalgo was a bad Indian. He deserved to die. His medicine was bad medicine. We had long known that; this was only why he had been driven out by the tride long ago and lived away from the tribe. He had his revenge.

"It is not true that the sick went to him to be cured. They would not do that. He did not cure people, but made them ill. They feared the bad medicine.

"Bine Nimalgo was very strong and very wicked. He had a magic bow and arrow, with which he could shoot from very far away the spot sickness and other bad things into his enemies, and he hated everybody because he was bad.

"He alone had the bow and arrow. Many had tried to find them, but they could not. He had well him them. There was bad magic in the cache, so that no one found it. By night he shot the arrows and we fell ill.

"It was this that made hundreds lie down, and many of them died. When they felt the bad medicine in them they covered their faces with their blankets and sat waiting. They died bravely.

"We could not find the bows and arrows and the tribe was dying. And the Navajos are greatest of all the Indian people. This is known.

"This is why they went to the hogan (hut) of Bine Nimalgo. There were seven squaws and five fighting men who went. I do not know their names, but they were all Navajos. They did not fear death for themselves, they went for the tribe.

"I have said that the angry one was far off. The chosen twelve went to his place. I do not know their names.

"They reached the hogan and danced the death dance a long time; they tied Bine to a tree, that he might see the dance. It was a dance for him.

"Then they told Bine Nimalgo how one by one he had slain the young men and the babies. And one by one as they told him this they broke the bones in him—broke them in short pieces, beginning with the little bones—and after that the great ones that do not break easily.

"He lived long, for he was a very strong man. The bad medicine made him strong.

"They took off his scalp, for he was an enemy. They cut off his ears. Where he has gone they will know him by these signs. I think they cut away his arms and legs. They danced the death dance and sang to him his bad deeds while they did these things.

"I do not know the names of the twelve who did this.

"When they were weary they fired twelve bullets into the body.

"Then they cut the thongs that held the body to the tree, and they put Bine into the hogan. His legs and arms and all the parts of the body they put in together. Then they set fire to the higan and sang and danced about it, and it burned very fast. The fire ate up all the bad medicine. The ashes were clean.

"This is the true story. Whatever else has been told is a lie."

Doc Obija was with difficulty induced to tell his story. A small bribe that looks large to an Indian was the inducement finally offered. He believed firmly that the sorcerer was guilty and his punishment just.

Of course, Obija, like all the rest of the Navajos, knew who the guilty twelve were, but he will never reveal their names.

MENTAL PICTURES.

"Did you ever notice that when an idea becomes fixed in the mind it is very difficult to change it, especially in the case of extremely sensitive and highly nervous persons?" asked a Brooklyn expert on nerves. "Not long ago I had a visit from a man who was afraid he was losing his reason because of a very simple persistence of a certain thought or idea which he could not shake off. The history of the case is one often found in cases of hypochondriasis developed from using the telephone. My patient for about a year's time had occasion to telephone every day to a trade customer in New York—Manhattan, if you like. The New Yorker had a peculiar high tenor squeak to his voice, and somehow my friend got to picturing him as a little chap with a thin face. This habit grew day after day until the customer took a real shape and form in the mind of my patient, all based, of course, upon his voice. As he talked over the telephone there was always mentally pictured that little chap with the thin face and squeaky voice. Well, one day my patient called at the office of his New York customer, and as he walked into the place he saw a tall, fat man weighing nearly 300 pounds—he could scarcely believe his eyes. When the fat man opened his mouth and talked, my patient says, the squeaky voice with which he was familiar sounded strange and unnatural. He told the owner of the absurd voice, in view of his size, about having pictured him as a thin little person, and there was a good laugh over the odd difference of the reality.

"But the next day when my friend used the telephone and the squeaky voice came to him, he had to struggle to get away from thinking of his fat patron as being little and thin. He talked the matetr over with his wife and laughed about it, but soon there came a time when he forgot all about the actual existence of his customer, and the little thin faced chap was again talking to him over the wire. Then it was that he came to see me. He feared, he said, that his mind was giving away, because of the persistence of the odd picture of the thin man. I thought the case was easily disposed of, and told my friend to go to New York every day for a week and visit his fat customer. This he did, but every time he telephoned the squeaky voice would bring up the mental picture formed before he had set eyes on its owner.

"I was in despair and my patient was growing gray from worrying when I hit upon the happy expedient of placing a photograph of the fat man on the telephone, where the eye of the patient could rest upon it as he talked. The result was the disappearance forever of the thin chap. My patient, in looking at the picture of the owner of the squeaky voice, got his mind working upon the same lines that would have been followed had he met the fat man face to face the first time he heard his voice. These cases are common every day. We form queerly opposite pictures of men and women we hear over the telephone and never see, but in the great majority of instances the impression is a momentary one, and it is seldom that the mistake is ever forced upon us in the startling way described by the patient I told of.

"The telephone, by the way, has produced very many queer cases of neurasthenia that remain unaccountable excepting on the hypothesis that the new habit brings them into existence. I have had many patients who had to give up the use of the 'phone altogether where it had been used to a great extent before."

THE FIRST REAL NEW WOMAN.

Here is the real new woman at last. Others have called themselves new women, but none have proven their right to the title except by word of mouth. While other women have talked, Mrs. Mary Walling has acted.

Mrs. Walling is a mining prospector. She lives in one of the wildest portions of Southern Colorado. Her home is in the San Juan valley. She lives alone in a rough cabin, built by her own hands, on the summit of Gold Hill, opposite Buena Vista, the most picturesque city in Colorado.

The cabin is perched like an eagle's eyrie, 3,000 feet above Buena Vista and 10,000 above sea level.

Mrs. Walling spends all her time in looking for the gold she is sure she will find some day. She says she will have plenty of use for it when she finds it, for she will build a home in New England for the dear old mother she left behind there. The mother's picture hangs in a rude frame in front of the cabin.

Mrs. Walling has one companion and protector, her dog Sport. Sport is getting old. When he dies the woman prospector will be lonely indeed.

Mary Walling is a pleasant-faced robust woman of forty. She is as strong as a man. She wears short skirts that reach an inch or two below her knees, and stout leather leggings. She seldom wears a hat, and for that reason, perhaps, has an unusually abundant mass of hair.

She fells trees and cuts them into firewood. She carries a pick and shovel when she goes prospecting. She is a skillful hunter and her gun provides her with all the meat she needs. She carries water from a spring a mile distant. She needs few groceries, and these she carries in a bag on her back from Buena Vista, five miles away, over a path so rough that a man could scarcely follow it empty-handed. She often carries a bag of flour up the steep mountain side.

Despite all these masculine accomplishments there are man feminine touches in the rough cabin that Mary Walling built. She has transported the vivid Indian pink and the mountain rose to flower pots that were once cases of blasting powder which she found occasion to use in her mine. She has pressed wild flowers and framed them and there are skins of animals that she has killed upon the floor for rugs.

FINGER-PRINT TESTS.

In detective novels finger prints left by criminals, preferably in blood, play an important part; but truth seems stranger than fiction in the fact that the finger-print system of identifying criminals in India has been made so perfect that it would enable any intelligent person in a few minutes to distinguish the individual, if necessary, from all other persons now living in the world, or, if data were available from all other persons who have lived since the creation of man. The system is simplicity itself, and there is none of the elaboration of process of the costly and delicate machinery required for the anthropometric system. All that is needed is a piece of tin, a sheet of paper and some printer's ink. The ink impressions of the ten digits are taken and filed in the proper compartments of the proper pigeonhole, and it is on the classification of records and their distribution into the pigeonholes that the success of the system depends.

Every finger mark shows lines of the "loop" or "whorl" type and by a simple table of the combinations of the types in the ten digits, 1,024 main classes are made. These are again subdivided according to minor details, and the subdivision can be further divided, ad infinitum if necessary; but with the table before him any person of ordinary intelligence can place his finger on the corresponding card to a record in his hand within five minutes,no matter how many thousand cards there may be. It is calculated that the chances are about 64,000,000 to 1 against any two persons having single fingers identical, and the chances against all ten fingers being identical go beond mathematics altogether.