

It is beginning to look as if the flying squadron had simply "flew the coop."

The spirit of Wendell Phillips is not stalking about Boston to any extent these times when three leading hotels refuse to entertain a Bishop because of his color.

Thousands of scientific men are experimenting with the X ray in Europe and America, and as the subject grows on acquaintance, it is likely to hold a place among the leading topics of 1896.

Emperor William says that to the best of his knowledge and belief the relations between Germany and England are absolutely harmonious. He keeps his left hand on his sword merely from force of habit.

The French are said to have invested \$300,000,000 in the South African gold mines and a much larger amount in Russian stocks and Spanish bonds. The payment of the German war indemnity and the Panama Canal losses appear to have made very little impression on French wealth.

Russia has expressed a willingness to annex and govern Armenia with the permission of the other powers. It is a task no weak nation could accomplish. As a matter of geography and race Armenia should have gone to Russia long ago. England has barred the way, though unable to point out any other solution.

A proposal to exclude from the army, the legislature, and municipal office all persons whose fathers and grandfathers were not citizens, is before the French Chamber of Deputies. The rule would have taken Napoleon Bonaparte and Gambetta. A law admitting only the children of French citizens to the civil service is also under consideration.

Within recent years Africa has been parceled out among the powers of Europe, England having seized a broad belt of the continent reaching from Cape Colony to the mouth of the Nile. What is to protect South America, Central America, Cuba and Mexico from a similar fate? Nothing, if the historic policy of the United States is to be turned down by Lord Salisbury.

One of the best ways for the higher courts to lessen the lynching tendency is to refuse to set aside verdicts against criminals for any reason that does not touch the question of guilt or innocence. The people prefer to have justice administered by the duly appointed agencies, but when those agencies allow justice to be defeated on technical and frivolous grounds, other means of enforcing the laws have to be invoked.

A Philadelphia writer contends that everything in nature goes in threes, and that after discovering the luminant and the actinic power of light science should have known that there is another attribute, which has been found, and is called the X ray. "If the third ray," says this theorist, "has information to give us of the sun, moon and stars as vital and important as that conveyed by the luminant ray through the spectroscope, we are indeed on the eve of an inconceivably vast extension of the field of human knowledge." This view of the matter may be pronounced interesting, but uncertain.

In 1893, according to the report of the Commissioner of Education, which has been brought down to that year, the number of school houses in the United States was 235,426, valued at \$398,435,039, with an annual revenue of \$165,000,000, teachers numbering 383,010 and an aggregate of 15,083,630 pupils. The illiteracy in the United States has been reduced to 13.3 per cent., this including 56.8 per cent. among negroes, and 13.1 per cent. among white immigrants. But little over half of the negro population is now illiterate. While education in this country is extending at a rapid rate, there is still much to be done before reaching the standard of Germany, with only 1 per cent. of illiterates.

On the strength of experiments with the Roentgen ray a scientist has come forward with a pamphlet to claim that the sun is not an inconceivably hot body, but a habitable globe, with an ideal climate. It sends to the earth vast currents of electricity which, in passing through our atmosphere, are converted into light and heat. According to this theory the earth is a magnet, solarized in space, and between all heavenly bodies exists an interaction of electromagnetic currents. These currents from the sun are fully returned to it, because the reaction of the other heavenly bodies equals the sum total of the sun's electric discharges. In regard to the creation of the earth, the author has no explanation to offer, but he says the sun is not going to cool off, man will not disappear, nor will the earth ever become a frozen ball on account of the sun's loss of heat.

The University of Pennsylvania has established a series of scholarships and fellowships for post-graduate study for two years and for three years after taking the degree of Ph. D. The scholarships make provision for three classes; The men who have the ability which justifies their taking a year more than the college course; those who are fitting

themselves for the degree of Ph. D., so as to teach or carry on research, and the exceptional men on whom six or seven years of special study is not wasted. The new step taken by the university is one of the highest importance, as it bears upon the promotion of liberal study for the development of knowledge and the training of men fitted to do the best work in teaching or in any other calling which requires a general training of a specific character.

No sooner have the X rays given surgeons an interior view of the human body than new surgical operations have been projected more wonderful than the X rays themselves. There is a man in Chicago who, having undergone a resection of the femur, had three inches of a calf's bone inserted to preserve the length of the limb; but even this feat is to be eclipsed. Dr. Miller, of Fertile, Minn., is experimenting to test the practicability of transferring the kidneys of one animal to the body of another. He has already attempted the operation and overcome the most serious obstacles, and is confident he will soon be able to replace the diseased kidneys of a man with those of a dog. The prospect which these experiments open up is rather confusing. Evidently the time is approaching when Bright's disease will lose its terrors, for if this malady attacks a man he will simply get a new set of kidneys and go about his business. But the danger is that the knowledge that this can be done will only encourage self-indulgence, and result in a general breaking down of the system. On the other hand, there is a prospect that new livers, hearts, and lungs may be provided in the same way, so we are all at sea again. One thing to be considered before one submits to such operations is the effect of these organic repairs on character. If, as materialists assert, every man's character is the inevitable product of his physical nature, it follows that no serious change can be made in the organs of his body without a corresponding change in his mental traits. Probably no one doubts that if a man's brains were taken out and replaced with calf's brains it would make a change in his way of thinking. But it is just as obvious that if he had a calf's liver it would make a proportionate change in his character; and so on with the other organs. Then the question arises whether these changes would injure human character or improve it; and this of course depends on the man. Some cynic has said the more he saw of men the better he thought of dogs, and probably he would consider that the more dog there could be transferred to a man's body the better man he would be. Certain it is that there are men, here and everywhere, who with some traits of the dog, the hog, and even the hyena introduced into their character would be better citizens. But one thing leads to another, and we are next brought face to face with an awkward problem concerning personal identity. If one part after another of a pocketknife is changed it gradually ceases to be the same knife. Much more if a man's vital organs give way to those of the sheep, the calf, and the dog, he must become a different moral being. Is he a man at all? Has he a soul? Is he accountable and immortal? After all, it is difficult to tell whether Dr. Miller should be encouraged or not in his daring experiments.

**A Miraculous Cross in the Sky.**  
A miraculous cross upon the heavens was seen by Hungus, King of Piets. It was at a time when Achaia, King of the Scots, and Hungus were routed by Athelstan, King of Northumberland. They had been defeated at every turn, and in their disordered flight had come to East Lothian. The first night in the country last mentioned was one of terrible forebodings to the fugitive kings, and during his troubled sleep Hungus dreamed (he claimed it to be a vision) that he saw the cross of Saint Andrew (the X) held out upon the sky, and that it waved back and forth "as a signal for him to press on to victory." Early the next day the fugitives began to retrace their steps, and during the day, so tradition says, Hungus and all his army saw a verification of the previous night's vision or dream in the shape of a titanic Saint Andrew's cross clearly pictured on the heavens. All of King Hungus' soldiers, being now satisfied that the "sign" was a token of victory, were only too anxious to meet the Northumberland invaders, from whom they had been flying in such wild disorder the day before, and if history is to be believed, they did meet Athelstan, whom they killed after they had utterly annihilated his army.

**The Community of Letters.**  
Writers have liked to speak of the Republic of Letters, as if to mark their freedom and equality; but there is a better phrase, namely, the Community of Letters; for that means intercourse and comradeship and a life in common. Some take up their abode in it as if they had made no search for a place to dwell in, but had come into the freedom of it by blood and birthright. Others buy the freedom with a great price, and seek out all the sights and privileges of the place with an eager thoroughness and curiosity. Still others win their way into it with a certain grace and aptitude, next best to the ease and dignity of being born to the right. But for all it is a bonny place to be. Its comradeships are a liberal education. Some, indeed, even there, live apart; but most run always in the market place to know what all the rest have said. Some keep special company, while others keep none at all. But all feel the atmosphere and life of the place in their several degrees.—Century.

"The game is up," remarked the hungry customer as he noted the advance in price of birds on the bill of fare.—Philadelphia Record.

## MUNITIONS OF WAR.

MADE AT THE ROCK ISLAND ARSENAL.

Gigantic Shops for the Manufacture of the Army's Ordnance—Picturesque Surroundings of the Depository of Munitions.

Equipment for an Army. If ever again it is decided by the United States Government to unleash the dogs of war Rock Island will at once become a pivotal point of perhaps greater international importance than any other spot of land of equal size in this country. Not the city of that name, but the island itself, the

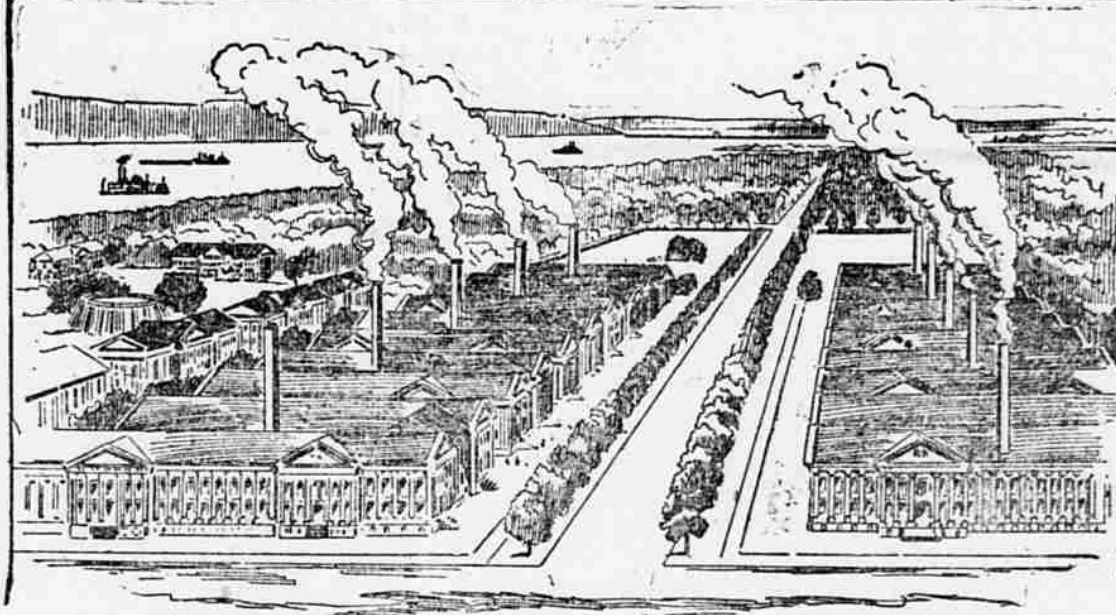


CAVALRY SOLDIER EQUIPMENT.

site of the largest arsenal belonging to this government. Rock Island is in the Mississippi River, about 300 miles above St. Louis and ten miles below Galena. It is nearly three miles in length and varies in width from one-fourth to three-fourths of a mile, and contains, above low-water mark, 970 acres. Lengthwise the island lies nearly east and west, such being the course of the river at this point. The civil war early showed the need of a great armory and arsenal in the Mississippi Valley where the legions of the Western States could be rapidly armed and equipped for war.

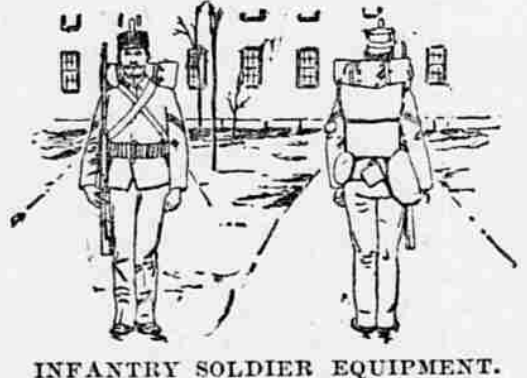
Rising well out of the bosom of the broad father of waters, among the high surrounding hills on which the cities of Davenport, Moline and Rock Island are built, with an immense water power right at hand, situated so far inland as to be secure from an enemy's attack, affording that seclusion so necessary for the prosecution of work of a warlike character and possessing fine rail and water communication, the island of Rock Island would seem marked out by nature as the ideal spot for the greatest United States armory and arsenal.

The United States acquired its title to the island through a treaty which was made with William Henry Harrison, Governor and superintendent of Indian affairs for the Indian territory and district of Louisiana, with certain chiefs of the Sac and Fox tribes of



ROCK ISLAND ARSENAL.

Indians at St. Louis in November, 1804. Black Hawk, the famous Indian hero of the Black Hawk war, was the principal chief of the Sacs, and did not sign the treaty, but always held that it was not binding. Congress in 1862 made the first appropriation for the construction of the arsenal, which has been followed since by some \$12,000,000 for government improvements, besides annual appropriations for running expenses. The noted artillery engineer and ordnance scientist, General Thomas A. Rodman, ordnance department, U. S. A., was assigned to the duty of commencing the construction of the arsenal, which, after long and brilliant work, was carried to successful completion by Colonel D. W. Flagler, now



INFANTRY SOLDIER EQUIPMENT.

brigadier general and chief of ordnance. General Rodman died at his quarters at the arsenal June 7, 1871.

**Great Military Plant.**  
This great military plant consists of ten immense fireproof stone shops of U-shape, with a system of dams giving over 3,000 horse power, and the necessary storehouses, magazines, laboratories, barracks and quarters, situated near the center of the island. Five of these great shops, placed in a row, each of which cost nearly \$500,000, are intended as an armory for the manufacture of small arms, such as rifles and carbines and cartridges, and the remaining five shops, in another row on the opposite side of the handsome, tree-embowered avenue, facing the first row, are intended as an arsenal for the construction of ordnance and ordnance stores. When in full operation during time of war, and provided and equipped with all the necessary machinery, the arsenal shops would employ some 20,000 workmen, with twenty

line officers and 200 ordnance soldiers as guard. Under these circumstances the capacity of the arsenal and the armory would be the full armament and equipment for a regiment of cavalry or of infantry, some 1,200 strong, each working day.

The departments fully equipped and running at present comprise the machine, carpenter, leather, paint, gun-carriage and forge shops, the foundry and rolling mill employing about 400 men, with a monthly payroll of nearly \$30,000. The administration of the government shops at all the arsenals is excellent, and the relations between employer and employed would form an excellent model for many of the large manufacturing establishments of the present day. It is steady work with short but busy hours every day, good wages and certain pay, just treatment, clean and roomy shops.

**The Present Output.**  
The arsenal to-day is engaged in the manufacture and supply of ordnance stores for the regular army, the national guard, the military colleges, and partly for the marine corps, United States navy, and the naval reserves a total force of over 150,000 men. The main part of the work consists in the construction of siege gun carriages, siege howitzer carriages, fixed gun carriages, with limbers, caissons and battery wagons complete, the complete accoutrements for infantry and cavalry soldiers, horse equipments and harness for light artillery. No rifles, swords or revolvers are manufactured here in time of peace, but large quantities of these small arms are sent from the national armory at Springfield, Mass., to be distributed to the army forts, national guard and military colleges of the Mississippi valley and the Western States. All iron, wood, cloth and paper targets are also made here, besides the regular elliptical targets, iron frames to be covered with cotton cloth and representing soldiers in the act of firing, kneeling and lying down on the skirmish line, and cavalry soldiers on horseback. Small arm cartridges of all kinds are received in car lots from the government cartridge factory at Philadelphia, to be distributed also as above. In the several laboratories all kinds of cartridges for fixed guns are made up. The fixed guns and their projectiles are made at Watervliet arsenal, West Troy, N. Y. Contracts for material used in construction at arsenals are made yearly.

In the gun yard of the Rock Island arsenal may be seen grim trophies of several wars. One gun speaks of revolutionary struggles and patriotism and bears this inscription: "Surrendered by the convention of Saratoga, Oct. 17, 1777." This trophy of the surrender of Burgoyne has for many years been an honored guest at the arsenal.

**Old Man Was Eligible.**  
James Payn, the London writer, tells a reasonable story. He says a young man was paying his attentions to a

"beloved object," contrary to the wishes of her father, "a man of thews and sinews," and one day the latter kicked the lover violently into the street. In a day or two (after recovery) the rejected suitor, apparently not one whit discouraged, called at the house once more. "What, again?" exclaimed the paterfamilias, putting on his well-soled boots for action. "No, sir," cried the young man. "I have given up all hope of winning your daughter; but in consequence of that astounding kick you gave me the other day I have been requested, on the strength of my earnest recommendation to the committee, to ask you to join our football club."

**Doctors Starving in France.**  
In the British Medical Journal a Paris correspondent says at least 2,500 physicians in France are battling with starvation, and he adds that physicians themselves are largely responsible for this state of affairs. They "have taught lady patronesses of different societies to diagnose diseases, to dress and bandage wounds, to vaccinate their own children and those of their neighbors. Medical science is vulgarized in every way. Doctors write in important daily papers explaining how bronchitis and cramps of the stomach are to be cured, and in fashion journals they teach how to cure pimples and avert headaches. Five hundred thousand gratuitous consultations are given yearly in Paris dispensaries, and in this way a large amount of fees is diverted from the medical profession."

**What She Said.**  
"Liz," said Miss Kiljordan's youngest brother, "do you say 'woods is' of 'woods are?'"  
"Woods are," of course," she answered. "Why?"  
"Cause Mr. Woods are down in the parlor waitin' to see you."—Exchange.  
Spratts—"Miss Elder is much older than I thought." Hunker—"Impossible!" Spratts—"Well, I asked her if she had read Esop's Fables, and she said she read them when they first came out."—Home Journal.

Should a man think more, or less, of a man who gives him a poor cigar?

## RICHEST MAN IN THE WORLD.

The Duke of Westminster Is Awarded that Distinction.

His grace the Duke of Westminster, honest man, sleeps easily. Though his children number some seven living, and he has grandchildren too many to be reckoned readily, yet he has no fear for the morrow. The duke is probably the richest man in the world. Li Hung Chang has been rated higher, and Americans in their pride claim greater wealth for Mr. Rockefeller, but, everything considered, the Duke of West-



DUKE OF WESTMINSTER.

minster's holdings will doubtless top those of the Chinaman and the American. He is certainly the heaviest owner of real estate in the world. There is considerable uncertainty as to the title of property in China. It is the subject's to-day; it may be the emperor's or it may be parceled out among



EATON HALL, HOME OF THE DUKE OF WESTMINSTER.

other citizens to-morrow. Mr. Rockefeller's is largely in stocks and securities. The duke's is principally real estate. Its value and earnings are little affected by outside causes. For a century indeed the only variation has been an increase of value and rentals. The duke is interested in many commercial enterprises and railway and other corporations, but, as was said, the bulk of his belongings is in the nature of real estate, business blocks, market places, houses and farms. His income ranges from \$4,000,000 to \$5,300,000 annually. It is not so great as that of several Americans, whose aggregate wealth is much less than that of Westminster, but if their returns are larger their risk is greater. The duke's belongings, real and personal, amount to about \$175,000,000.

The duke's popularity is as great as his wealth. If his position were elective and he were to resign, he would be returned again at the next election. He is a truly democratic peer—making the true distinction between democracy and the vulgarity and viciousness of Aylesford, Queensberry and other notorious aristocrats dead and alive. He is beloved of his tenants and admired by people of all classes whether they are his dependants or otherwise. His popularity was not gained in politics or in diplomacy, but from association. His hospitality is boundless and his many ancestral seats are always filled with guests. The fire is alight the year round. It is in the hunting field that his grace finds greatest joy. He is a true sportsman, and is careless whether farmers or princes accompany him in the chase. It is the game he seeks, not society. He is the best judge of a horse in the United Kingdom, and is not wholly theoretical in his information. He can fit a racing plate to a horse's foot with the skill of a master smith. His horses are the pride of his life. His stud farm is the estate on which his principal country seat, Eaton Hall, is situated. This is in Chester, near Hawarden, the home of Gladstone. The lords of the stud are the great Ben d'Or and Ormonde.

The duke, who describes himself as being in the prime of life, was born October 18, 1825, and is now in his seventy-first year. He has been married twice, the first time in 1852. His wife was Lady Constance Gertrude Leveson-Gower, daughter of George Granville, duke of Sutherland. They had eleven children, of whom six are now living. The first duchess died in 1880, and in 1882 the duke married Katherine Caroline Cavendish, daughter of Lord Chesham. They have three children.

In discussing the democratic ways of the duke Englishmen relate the story of a stranger who desired to see

the art treasures of Eaton Hall. He met an elderly man walking about the grounds, and from his dress, which was a semilunatic costume and not too new, thought the man to be a retainer of the duke. The stranger asked the man to show him about the place, which the person did, pointing out, explaining and listening to the visitor's comments on the duke and the family with interest and received with thanks a half sovereign to requite him for his trouble. The following day the visitor rode out to the hunt and in the master of the hounds, who was also lord lieutenant of the county and Duke of Westminster, he recognized his guide of the day before. It is explained by the enthusiastic fellow countrymen of the duke that the reason the great man did not decline the "tip" given him by the visitor was his fear of disconcerting the stranger. It would have been so utterly out of character for an English servant to decline money that the peer would have been obliged to disclose his identity to explain his refusal.

**A Ghost Story Exploded.**  
It is a relief even to those who scorn to believe in the supernatural when a supposed ghost is clearly proved to be of earthly origin. One of the most famous murder cases in Australia was discovered by the ghost of the murdered man sitting on a rail of a nam (Australian for horsepond) into which his body had been thrown. Numberless people saw it, and the crime was duly brought home. Even the skeptical admitted that this ghost seemed to be an authentic one. But some years after, a dying man making his confession said that he invented the ghost. He witnessed the crime but was threatened with death if he divulged it as he wish-

ed to, and the only way he saw out of the impasse was to affect to see the ghost where the body was found. As soon as he started the story, such is the power of nervousness that numerous other people began to see it, until its fame reached such dimensions that a search was made and the body found, and the murderers brought to justice.

**The Touroh Prison.**  
The chief prison in Egypt for male hard labor convicts is at Touroh, about eight miles south of Cairo, where the adjacent quarries, which once furnished limestone to the builders of the great Pyramids, supply unlimited scope for labor six days a week. There are nine hundred and fifty convicts, and though one hundred of them are "lifers," there are others whose term is only for six months. Strict discipline is maintained by sixty-five wardens, who are unarmed and do not carry even a stick or whip; but by night there are nine sentries and by day there are four, who patrol the roof and the outside of the prison, and who know how to use their loaded rifles with deadly aim. These sentries are blacks from the equatorial provinces, and have prevented more than one attempted escape. Nearly all the convicts are natives of Egypt, the blacks only supplying five per thousand and the Nubians averaging only two per thousand. Any extra bad characters among the convicts, such as the ringleaders of attempted revolt or escape, are locked up at night in solitary cells to lessen their chances of contaminating their fellows.

As a whole, the convicts are by no means of a ruffianly type, and their physiognomies are very like those of the ordinary peasant. In this country, where crime is at such a minimum and where even the lunatics are as quiet as sheep, it is not too much to hope that education and improved environment may one day do much to improve the lot of the townfolk, from whom the convicts are mostly drawn. The "ticket-of-leave" system has not yet been introduced into Egypt, and would certainly be worth a trial, for at present there is very little incentive to well-conducted convicts to lead a peaceful, hard-working life within the prison bonds. Every visitor cannot fail to be struck with the very healthy, well-fed appearance of the prisoners, and on inquiry I was told that there were only fourteen on the sick list.

**Not His Fault.**  
Old Lady—Didn't I tell you never to come here again?  
Up-to-Date Tramp—I hope you will pardon me, madam, but it is the fault of my secretary; he has neglected to strike your name from my calling list.—Tid-Bits.

## PROPOSED BRIDGE ACROSS THE POTOMAC AT WASHINGTON.

