

THE AMERICAN BOY.

To say you were "born here—that settles the matter. Not quite, perhaps much as the marching and noise. The burning of powder, the din and the clatter. On Fourth of July making soldiers of boys. You see the American standard was set quite high at the first, and it's rising still higher. An American boy is allowed to forget that he cannot be great through the fame of his sire. The men who are great on our history's page. That speaks of our work for our first hundred years. Whose fame is increasing as age after age looks backward, to drown in the gulf of the years. Are great from the fact that they stood for the right. Regardless of person, of place, or of peif; They battled each evil that rose into sight For the good of their fellows, forgetful of self. This is what is expected. You may have been born in the slums of a city, or far in the West. In the shimmering plumes of the opening corn; Or first saw the light where a king's golden crown. Overshadowed the land; where the poor turned their eyes. From their hovels, far out over mountain and wave. To the sunset Republic, where liberty's skies smiled down on the homes of the free and the brave. Being born an American, can't be denied. Gives a man a fair start on the highway of fame. Or wealth, or whatever else he may decide. To deserve, to achieve and attach to his name. But whoever would win must be ready to work. He must earn and secure before he may enjoy. In all the wide field there's no sheaf for the shirker. It means this to be an American boy. You may not be selected for pellious trips. Over mountains and glaciers, or sail in the van. Of the fleet for entrapping an enemy's ships. Then take to the waves on a catamaran. But you must be ready, and stand by your guns. Wherever you find them, as firm as the earth. If you would be proved one of Uncle Sam's sons. By lawful adoption of fortunate birth. The hold your head high, your eyes on the stars. And stripes of our banner, your hand firm and sure. You will win, though you carry an enemy's scars. Like dashed strong because you are pure. Stand fast for the right. Look well to your work. Build your life of pure gold, with no grain of alloy. Do your best if you'd win yourself loftiest praise. And deserve to be called an American boy.—Margaret Holmes Bates.

A Premature Fourth.

BY PAUL INGELW.

INCIDENT Fourth of July enthusiasm was as high as the Millville accommodation rolled into the depot, discharging a cheery-faced, portly gentleman of 50, carrying a bulging satchel. He came out on the "market street" in time to get a shower-bath from a pack of firecrackers flung by a crowd of arching, enraptured him in a veritable "breeze of glory." "Hi! you young imps!" he roared—but the coterie only grinned, for their victim was chucking as though he enjoyed the excitement, tossed them a quarter, and laughingly stroled over to the farmers' wagons lining the square. "There's the best-natured man I ever did see!" the occupant of one was remarking as the man sauntered up. "Any of these rigs going down the old Fock Road?" he inquired. "No," nodded the other—"thirty miles." "A lift of two will suit me." "Jump in. I say, stranger, you're the beamiest mortal I ever set eyes on! I'd chased those bothersome kids with the whip lash." "That was a boy myself once," retorted the traveler. "And—beating? Why shouldn't I be? Just back from the Philippines, easy conscience, some money, and come home to have a jolly Fourth with my best friends." Uncle Rufus, an orphan from an early age, had experienced some hard knocks and single-handed, had fought his way to quite a competency. Two miles from Millville lived the only relatives he knew. They were the Phillips and the Ames families, occupying neighboring farms—his half-cousins. He had drifted down here a few years back, and they had made it very pleasant for him. Especially had young George Ames put himself out to entertain him, and quite naturally winsome, warm-hearted Alma Phillips discovered a kindred friendship. A great idea came into Burton's mind; these two were made for one another. They were very young—only sixteen then—but mutually in love. It would be the object of his life to nurture their pretty engagement. They would marry, he would endow George with a farm, suggesting a life-tenancy for himself as a compensation. Then came up the Spanish war. Burton caught the martial fever—at home—and the real malaria in the Philippines. Now he was coming back to carry out his original plans, and was joyful as a vacation school boy, as he jumped down from the wagon. "Hello!" he expanded, as he neared the Phillips farm. "There's old Seth, sure! Hi!" roared the great old fellow, and nearly shook his cousin off the hay rake with the suddenness of his hail. "Well, well!" spoke the farmer, staring. "This is a surprise!" "Thought it about time for a wedding—see?" roared Burton. "So, bobbed down on you—hey?" "Wedding—who's?" muttered Seth, crabbedly. "Who?" retorted Burton. "Who should it be but George and Alma?" "Set up!" shouted Phillips, savagely. "Don't mention any Georges, or Ames, or that rascally tribe, to me!" "Eh! what's happened here?" stared the astounded visitor. "Go up to the house, I'm busy, but I'll hurry through and join you soon. Hold on—say, Burton; you're not going down to see Si Ames?" challenged Seth roughly. "Why not?" "Then drop me—that's all! I'm through with that rubbish; you can't be my friend and his'n, too?" "Whew!" whistled Burton, trudging on. He sat down by the wayside, finally. His wits were askew. What, indeed, was happening? Things seemed turned all topsy-turvy! He got up as he saw a light buggy approaching, and recognized old Lawyer Russell. There was an interchange of greetings. The attorney stated he was going first to the Phillips farm, then on to Ames' place. "I'll go with you. Anything valuable here, Squire?" asked Burton, as he placed his satchel behind the seat next to the attorney's document bag.

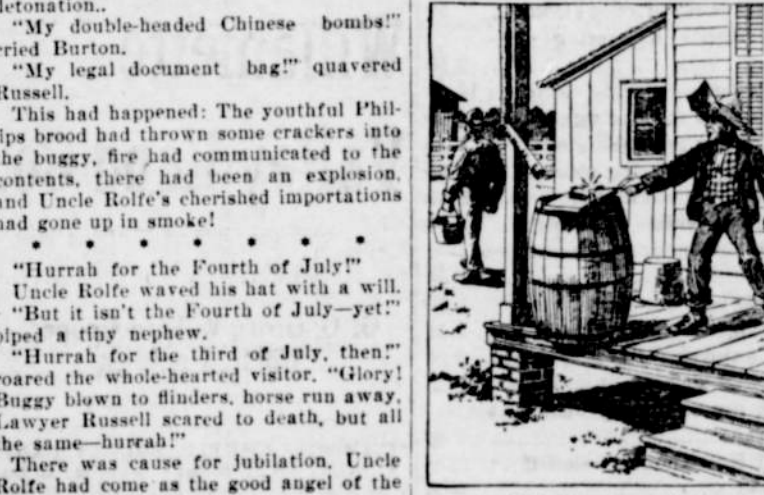
UNCLE SAM CELEBRATES.



One hundred and twenty-six years old to-day, and feelin' frisky ez a kitten, 'V'rosht!—Minneapolis Journal.

"Nothing but the papers in this pestiferous dispute between Ames and Phillips," answered Russell. "Because I've got some extra handbills in my satchel!" half-laughed Burton. "How's that?" "A dozen genuine double-headed Chinese giant fire-bombs. Brought 'em from Manila to celebrate Fourth of July with the Phillips kids. Looks, though," suggested Burton, ruefully, "as if there isn't going to be much celebrating around these parts!" "I fear not," gravely replied Russell. "I suppose you know the bone of contention between these two stubborn-headed old fellows?" "I don't, but I want to know," asserted Burton. "Well, you remember the eighty-acre strip that lies between the two farms—belongs to the Morris estate. Last year Ned Morris leased it for ten years to Ames. Same time, unknowingly, Lida Morris leased it to Phillips. Both claimed it. Neither would give in. They've fought like cats and dogs over their respective claims. I suggested they use it alternate years. No go. I've got the deed in my document bag there, and I've come down to see if they won't fix the matter up." When they reached the Phillips farm a joyous brood of children surrounded Uncle Rufus. He was kept busy distributing newly minted dollars and agreeing to help them shoot off their fireworks, and act the festive old boy generally. Provided with the means of replenishment, the children set off some of their stock in hand. Meaning, old Seth came in from the fields. Burton sat on the veranda, watching the stubborn-eyed farmer while the lawyer explained that he and Ames must compromise or go to law. "Law be it!" cried Seth. "I'll never give in." Bang! A awful clatter rent the air. The spot where they had left the lawyer's horse and buggy was a maelstrom of fire and detonation. "My double-headed Chinese bombs!" cried Burton. "My legal document bag!" quavered Russell. "This had happened: The youthful Phillips brood had thrown some crackers into the buggy, fire had communicated to the contents, there had been an explosion, and Uncle Rufus' cherished importations had gone up in smoke! "Hurrah for the Fourth of July!" Uncle Rufus waved his hat with a will. "But it isn't the Fourth of July—yet!" piped a tiny nephew. The explosion had ended the Fourth, then! He roared the whole-hearted visitor. "Glorious! Buggy blown to flinders, horse run away, Lawyer Russell scared to death, but all the same—hurrah!" There was cause for jubilation, Uncle Rufus had come as the good angel of the occasion. Now, four hours after the explosion, two shame-faced neighbors shook hands, and "made up," and meekly smiled upon happy Alma and George, cooling among the rose bushes. The explosion had ended "litigation," for it had blown to flinders both of the leases that made the eighty acres a bone of contention. "Two well-disposed, lifetime-friend cronies fighting over a bit of land!" railed the real malaria in the Philippines. Now he was coming back to carry out his original plans, and was joyful as a vacation school boy, as he jumped down from the wagon. "Hello!" he expanded, as he neared the Phillips farm. "There's old Seth, sure! Hi!" roared the great old fellow, and nearly shook his cousin off the hay rake with the suddenness of his hail. "Well, well!" spoke the farmer, staring. "This is a surprise!" "Thought it about time for a wedding—see?" roared Burton. "So, bobbed down on you—hey?" "Wedding—who's?" muttered Seth, crabbedly. "Who?" retorted Burton. "Who should it be but George and Alma?" "Set up!" shouted Phillips, savagely. "Don't mention any Georges, or Ames, or that rascally tribe, to me!" "Eh! what's happened here?" stared the astounded visitor. "Go up to the house, I'm busy, but I'll hurry through and join you soon. Hold on—say, Burton; you're not going down to see Si Ames?" challenged Seth roughly. "Why not?" "Then drop me—that's all! I'm through with that rubbish; you can't be my friend and his'n, too?" "Whew!" whistled Burton, trudging on. He sat down by the wayside, finally. His wits were askew. What, indeed, was happening? Things seemed turned all topsy-turvy! He got up as he saw a light buggy approaching, and recognized old Lawyer Russell. There was an interchange of greetings. The attorney stated he was going first to the Phillips farm, then on to Ames' place. "I'll go with you. Anything valuable here, Squire?" asked Burton, as he placed his satchel behind the seat next to the attorney's document bag.

FARMER BOY CELEBRATES.



Youth of the country wakes up to the day of crackers and eloquence.

At a concert given at Fakenham the orchestra, which comprised a violin and violoncello, were not well up to reading from sight. A tenor, who had been engaged for the evening, commenced a little operatic selection, which entirely put the orchestra out. Violin turned to cello and exclaimed: "Tom, duw thee know where the tenor be?" "No." "Well, thee keep on the open string. I'll mouch about a bit; we'll soon find him."—London Spare Moments. He Knew It Was Sarah. An old man would not believe he could hear his wife talk at a distance of five miles by telephone. His "better half" was in a country shop several miles away where there was a telephone and the skeptic was also in a place where was a similar instrument. On being told how to operate it, he walked boldly up and shouted: "Hi! Sarah, Sarah!" At that instant lightning struck the telephone wire and knocked down the man down. As he scrambled to his feet he excitedly cried: "That's Sarah, every inch!" George Wore False Teeth. During the latter part of his life Washington wore false teeth, made by a dentist named Greenwood. His teeth did not fit well and pushed out his lower lip. He had a lot of trouble with his teeth, and there is in existence a copy of a letter which his dentist wrote to him a year before he died. The dentist tells Washington that the old set of teeth which he sent him from Philadelphia was very black, and that it must have been discolored by his soaking them in port wine or by his drinking too much port wine. He warns Washington that all wines containing acid are bad for the teeth, and advises him to take out his teeth after dinner and put them in clean water, and should any holes be eaten in them by the acid, to fill them with wax and seal them tight with a piece of red-hot iron, such as a nail. He closes his letter as follows: "If your teeth grow black, take some chalk and a piece of cedar stick; it will rub off. If you want your teeth more lustrous, soak them in broth or pot liquor, but not in tea or acids. To preserve teeth they must be very often changed and cleaned, for whatever attacks them must be replaced as often, or it will gain ground and destroy the works. The two sets I repaired is done on a different plan than when entirely new, for the teeth are screwed on the bars instead of being the bars cast red hot on them, which is the reason I believe they dissolve so soon near to the bars. Signed your very humble servant, John Greenwood. Dated New York, Dec. 28, 1798. Adept in Art of Hazing. Hazing is no longer confined to the colleges where men receive a "higher education." The girls of Sage College, the institution endowed by the wife of New York's famous dealer in puts and calls, have risen in their might and declare that such pleasantries shall hereafter be a part of the institution's curriculum. The toastmistress was "suddenly set upon by the sophs," says a veracious chronicler, but the freshmen "held their ground bravely and a long struggle followed." The toastmistress was captured, but afterwards escaped. Another freshman speaker, however, was taken, "hustled into a cab and driven around the city during the entire evening," being released only after she had made a speech, standing in front of the restaurant where her classmates were making as merry as they could without her, "extolling the sophomore class." A form of interclass pleasantries said to be much in favor among the young women of Wellesley is the sprinkling of flour on the locks of freshmen and sophomores, and vice versa. At Vassar the students in the second year give some form of evening entertainment in honor of the bashful newcomers. But Vassar and Wellesley are not up to date, and they are only girls' colleges, anyway. They order this matter better in Ithaca. PLANTS THAT IMITATE KIN. Methods by Which Inanimate Things Secure Protection. The methods of plants by which they protect themselves from their enemies by mimicking other plants which have adequate protection are interesting indeed. Rev. A. S. Wilson writes in Knowledge, London, as follows: "Insects perhaps more frequent in the seed than in any other part of the vegetable organism; it occurs, however, in other organs, and even the entire plant body may assume a deceptive appearance. A well known example is in the white dead nettle, which so closely resembles the stinging nettle in size and in the shape and arrangement of its leaves. In systematic position the two plants are widely removed from each other, but they grow in similar situations and are easily mistaken; anyone who has occasion to collect quantities of lamium is almost sure to get his hands stung by urtica, an experience calculated to convince one of the efficacy of protective resemblance. Among animals it is species provided with formidable weapons of defense that are most frequently mimicked by weak defenseless creatures. The stinging nettle is therefore a very likely model for unprotected plants to copy. A somewhat analogous case is the yellow bugle of the Riviera, which has its linear lobes, some of which are again linear lobes, and of which are again linear lobes. In this plant differs very materially from its allies. It has, however, acquired a very striking resemblance to a species of euphorbia, abundant on the Riviera. The acid juice of the euphorbia secures them immunity against a host of enemies. As the two plants grow together there is little room to doubt that, like the dead nettle, the bugle profits by its likeness to its well-protected neighbor. One of the pineapple family grows on trees in tropical America, and has a resemblance to a shaggy lichen so marked that it is generally mistaken for a plant of that order. The fly agaric, our most conspicuously colored fungus, according to Dr. Plowright, is closely imitated by a parasitic flowering plant, halophora volucrata, the

SOME ROYAL WOOINGS

SPOTS WHERE IMPORTANT PROPOSALS WERE MADE.

Romances that have figured in the otherwise cut-and-dried lives of a few of the great rulers of the Continent of Europe.

Many people are possessed of the idea that, as royal marriages have generally to be arranged as affairs of state, the prospective bridegroom has no occasion to woo his bride as the average man would do. This, however, is a totally erroneous idea, as will be found on reading the following authentic accounts of how and where some royalties proposed to those who ultimately became their wives, says London Tit-Bits. It was at Rosenberg, the palace of the Danish royal family, that King Edward VII. proposed to and was accepted by our gracious queen. His majesty—then, of course, Prince of Wales—first saw his wife in the cathedral of a continental town, and was so impressed with her beauty that he determined to secure an introduction on learning who the princess was. The result of that introduction was that a short time afterward the prince went over to Denmark and made a formal claim for the hand of the princess. A charming story is that told regarding the manner in which the late Emperor Frederick of Germany, then crown prince, proposed to the princess royal (the late Empress Frederick). The two became separated from the rest of a royal party, who were taking a walk over a Scotch moor in the vicinity of Balmoral. Suddenly the crown prince spotted a bit of white heather, and picking it up, gave it to the young girl beside him—for the princess was barely 18 years of age at the time. She knew, however, the meaning of the simple gift, and whispered "Yes" loud enough for her companion to hear. During the remainder of their lives Balmoral always had great attractions for the emperor and empress.

White Lodge, Richmond Park, was the place where our present Prince of Wales wooed and won the heart of Princess May. The prince went on a visit for a few weeks to his sister, the Duchess of Fife, who lived at Sheen House, near the park gates. Every day his royal highness could be seen strolling down Sheen lane, leading to White Lodge, and it was in the gardens round that mansion that he put the all-important question. In describing how the Marquis of Lorne, now, of course, the Duke of Argyll, proposed to Princess Louise, one cannot do better than quote the record made of the event by Queen Victoria in her "Leaves From the Journal of a Life in the Highlands." Our late queen wrote: "This was an eventful day. Our dear Louise became engaged to Lord Lorne. The event took place during a walk from the Glassait Shiel to Loch Dhu. We got home by 7. Loutie, who had got home some time after, told me that Lorne had spoken of his devotion to her and proposed to her, and that she had accepted him, knowing that I should approve."

It was at the same place, i. e., Rosenberg, the seat of the Danish royal family, where our king proposed to the "daughter of the sea kings," the present czar asked Princess Alix of Hesse in 1894 to be his wife. He had made up his mind long before that if he married it would be to whom he pleased rather than one commended to him by his counselors for state reasons. His choice fell upon Princess Alix, and a party was arranged at Rosenberg to allow Nicholas to meet this royal lady. Accounts differ regarding the actual spot where the proposal took place. Some say the czar proposed during an evening party; others that he did so in the gardens round the palace while out for a walk with the princess. The latter account, however, is generally regarded as correct.

When the speed of the machine was slackened to make a stop. All previous records of either electric or gasoline machines was broken by this run. Fournier's best record for a single mile was 51.4 seconds on the Concy Island boulevard. M. Serpollet beat this by just five seconds. The next best record was made by W. K. Vanderbilt, Jr., several weeks ago, when he made 68 miles per hour without the stimulus of a race. M. Serpollet's automobile is a curious looking object. It is strongly built and egg-shaped. Whence its nickname of "Serpollet's Easter Eggs." Immediately after the race an English chauffeur made a bid for it. Without question he paid M. Serpollet the price of \$11,000, the highest ever paid for a 12-horsepower machine, and he has taken it to England.

TURKEY HUNTING AN ART.

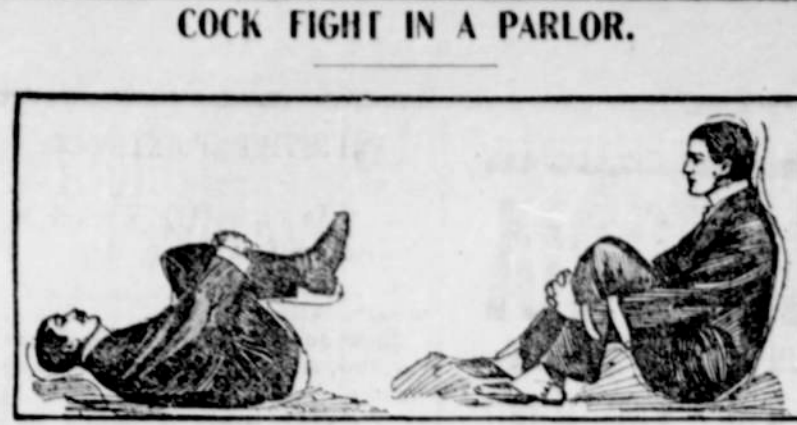
Wild Fowl Can Distinguish Marks of a Human Being. The successful turkey hunter is probably the most scientific sportsman in the world. He matches himself against the acutest of all feathered things. The turkey is not only gifted with extraordinary sight, hearing, wariness and alertness, but it knows the woods better than any mere man can know them, and it has distinctly the faculty of causality or reason. A turkey knows not only that the appearance of a certain part of the ground is not right, but also why it is not right. It will distinguish readily between marks of passage made by a wild animal and a human being. Negroes assert that it can smell powder, just as they believe that a crow can smell powder, but there is no evidence that its sense of smell is specially developed.

Its power of flight is not great, nor is it enduring on foot. There are many animals which prey upon it and can out run it. It has had to depend for preservation upon its intellect, and this intellect has come to be remarkably developed. The turkey is not hard to find and kill when it is gobbling from a tree top in the early spring morning, but the person who goes after one later in the day must know his business. It is sometimes taken in traps made of logs and roofed with branches, there being an entrance under the bottom log. Once inside, having been lured there by parched corn grains, it travels around and around looking for an exit higher than its head. It is sometimes slain, too, by being lured to a shallow trench dug in the woods and sprinkled with parched corn. A V-shaped blind having been prepared, thirty yards away. If shot legitimately, however, at any time save at daybreak or when flying into its roost at night, it must be called to the hidden gun, and in this the science of the hunter is made manifest.

How to Live Long.

Sidney Cooper, the veteran artist, who died recently at the age of 98, describes in his "Reminiscences" the mode of life which he followed for many years. "I used to walk five or six miles every day; now I only do three or four, but these regularly at the same hour. I always go to my painting-room at 7 o'clock in the morning, in the summer, half an hour later in the winter, set my palette, and paint till breakfast is ready at 8 o'clock. For this I eat oatmeal porridge, some

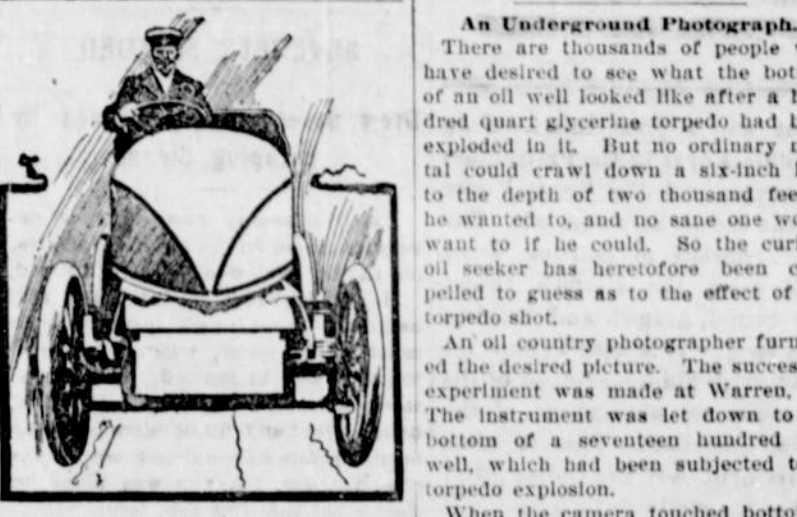
COCK FIGHT IN A PARLOR.



Many persons who would not think of going to see a real cock fight would be glad to see the kind which may be played in a parlor. It is played by two men, who are seated on the ground, opposite each other, and it is called "a human cockfight," because the tactics of the combatants are not unlike those of two cocks in a pit. The legs of each man must be tied above the feet, the knees must be drawn up to the chin and the hands must be crossed in front on the shins. When the men are in this attitude a cane is shoved under their arms in such a manner that its ends will rest on their arms, and then the combat begins. The object of each combatant is to shove the tip of his foot under that of his opponent, for if he can once do that he can easily give him a shove that will place him "hors de combat." One in the accompanying picture has accomplished this feat, and must be considered the winner, since his fallen opponent is unable to regain his position. The rules of the game require that the hands shall be fastened as well as the feet, but this is seldom done when the fight takes place in a drawing room or parlor.

A RECORD-BREAKING AUTO.

French automobilists are still discussing the wonderful achievement of M. Serpollet, who recently won the Rothschild cup by driving his new racing machine at the record-breaking speed of 76.45 miles per hour. They describe the feat as the "revenge of steam." The race occurred on the Promenade des Anglais, which is considered the most perfect racing course in France. The automobile attained such a terrific pace that it lurches all over the course. M. Serpollet and his assistant could hardly breathe and they nearly



M. SERPOLLET'S AUTO.

bread, and drink about half a pint of milk just warm from my own cows. I have not tasted a cup of tea or coffee for thirty-six years. I find the porridge very sustaining, and at the same time very provocative of appetite, while it keeps the head clear for a morning's work. Then I return to my studio and paint till lunch, at 12 o'clock, when I eat well and drink but little, after which I paint again till 3. Then I clean up my palette for the day and go out for my walk, returning in time to wash and prepare for a 6 o'clock dinner, which I enjoy without my glass of port, for I have quite given up that and every other kind of wine since my recent severe illness. After this I read my newspaper; at 9 o'clock I smoke my cigar, and at 10 o'clock I am off to bed."

An Underground Photograph.

There are thousands of people who have desired to see what the bottom of an oil well looked like after a hundred quart glycerine torpedo had been exploded in it. But no ordinary mortar could crawl down a six-inch hole to the depth of two thousand feet if he wanted to, and no sane one would want to if he could. So the curious oil seaker has heretofore been compelled to guess as to the effect of the torpedo shot. An oil country photographer furnished the desired picture. The successful experiment was made at Warren, Pa. The instrument was let down to the bottom of a seventeen hundred foot well, which had been subjected to a torpedo explosion. When the camera touched bottom a bright flash lit up the cavity, impressing a perfect picture on the negative. A cavity fourteen feet broad and seven feet deep below the oil sand was revealed. Into the cavity, enlarged by the force of a glycerine explosion, from the ordinary six inch hole the oil trickled and accumulated, ready to be pumped to the surface.

A King's Hot Weather Palace.

The following is a description of the King of Siam's summer house. At one of the king's summer seats there is a pavilion of a most extraordinary kind. The tables, chairs and slides are formed of glass an inch thick and a fathom in breadth, and so finely united with mastic, as transparent as glass itself, that not a drop of water can penetrate the building. A Chinese engineer constructed the pavilion in this manner as a certain remedy against the insupportable heat of the country. It is twenty-eight feet in length by sixteen feet in breadth, and is placed in the midst of a large basin, paved and covered with marble of different colors. When those who are to occupy the pavilion have entered the gate is shut, the seams stopped with mastic to prevent the entry of water, and the sluices being opened, the large surrounding basin is filled to the top, so that the whole pavilion is placed under water with the exception of the top of the dome, which allows for the passage of air for the respiration of those within.

A Sojourn in Siberia.

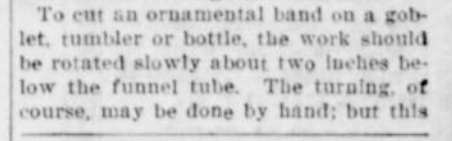
"My first purchase in Siberia," writes a traveler who recently made the transcontinental journey, "was a postage stamp; and, living in a country where officials are public servants, it seemed strange to me to start with that removed before a counter, behind which a man sat with his cap on, dressed like a major general, who graciously consented to sell me a stamp. Great as the postmaster is, he is nothing compared to an army officer. On one extremely hot day on the Amoor, a wealthy merchant was lying on a sofa in the cabin. He had removed his coat. A lieutenant in the army, traveling third class as a deck passenger, happened to see him in his shirt sleeves, and just above his head a picture of the Emperor. He thereupon ordered him to put on his coat in the presence of the Emperor. The merchant appealed to the captain of the steamboat, but to no effect."

Voodooism in Martinique.

Martinique has long been famous as one of the strongholds of voodooism in the West Indies. It is true that the fetich cult has not assumed the proportions and peculiar turn there that it has in Hayti, but at the same time the old voodoo doctors of Martinique have long enjoyed the reputation of being gifted with prophecy and of being able to forecast future events with surprising correctness. An old negro, a famous voodoo doctress in her day, told the Empress Josephine when a girl that she would marry a King, but would die in a hospital. Napoleon elevated her to the throne when he became Emperor of the French and she afterward died at Malmaison. Millions in Gifts. An annual cyclopeda for 1901 places the total gifts and bequests in the United States last year at \$167,399,000. There is one thing you men may as well learn early: that your wives don't really care if you like their new hats or not.

DEVICE FOR DECORATING GLASS.

A member of the Scientific American staff has devised a very simple and inexpensive apparatus for cutting initials, monograms and ornamental borders or bands on glass articles, such as tumblers, bottles, hand mirrors, etc., with emery powder. When a letter or the like is to be cut in the glass, the glass may be held stationary by any suitable means and then all that is necessary is about three pounds of medium-grade emery and a funnel having a tube from four to five feet long and one-fourth of an inch in diameter. The initial is cut through a paper stencil, which is fastened to the glass with mastic or held in place by rubber bands. The emery, falling through the tube and striking on the exposed glass, will cut quite rapidly, and three or four quinnings of emery will form the cut sufficiently deep. It may be stated that the stencil should be a trifle larger than the desired cut in the glass. To cut an ornamental band on a goblet, tumbler or bottle, the work should be rotated slowly about two inches below the funnel tube. The turning, of course, may be done by hand; but this



APPARATUS FOR ENGRAVING GLASS.

will be somewhat tiresome, and thus tend to lessen one's interest in the work. A boy with a little skill can rig up an old clockwork to do the turning, or the device illustrated here may be constructed from material found about the house. It consists of a suitably-mounted spindle, having a block of wood or a large cork on one end to fit snugly in the tumbler so as to support it, and also secured on the spindle is a drum, conveniently a large spoon, from which a cord extends to connection with a fixed double pulley and a movable double pulley to which the actuating weight is attached. If it is not convenient to procure pulleys, plates of metal, or even of wood, may be pierced with holes, through which the cord may pass, as shown in the cut; but, obviously, pulleys are preferable, because of the smaller friction and wear on the cord, which last may be a small fish line. When it is desired to inspect the progress of the work, the flow of emery may be cut off by a small cork attached to a string. When the string is loosened the weight of the emery will force the cork into the upper end of the funnel tube. The spindle should be provided with a crank for convenience in rewinding the cord, and during the rewinding, the work of the emery may continue.

Education of Parrots.

To teach a parrot to talk it is never necessary to place the poor bird in a darkened room or to starve him. Common sense would suggest that he should be made as happy as possible in his surroundings. Give him good food—hemp, maize, oats, biscuit. As a slice of fruit is always beneficial, a bit of apple, of pear, of banana, or of carrot will do very well. Also see that your pet has pure drinking water, a large cage, some soft wood to gnaw, with plenty of coarse grit on the floor of the cage, for he needs the small stones to aid his digestion. A parrot in those comfortable circumstances may then be left alone in a room while his teacher conceals himself in another. The teacher, who should be heard, but not seen, should repeat, with infinite patience, over and over again, the word or words he wishes his pet to learn. The female parrots do not talk—the female of the song birds, it should be remembered, is not fit singer—so that efforts of education in that line are quite thrown away.—Our Animal Friends.

Sand-Buried Documents in Turkestan.

In his explorations of Chinese Turkestan Dr. M. A. Stein has found, in some of the sand-covered towns and villages, many documents written on wooden tablets and carefully sealed, which, when deciphered, will probably throw much light upon the life of the people who formerly dwelt in this desolate region. The preservative properties of the sand have kept the ink black and the seals and binding strings intact. The script in which the documents are written is of a still existing form known in India. Some of the buried towns are one hundred miles from the present edge of the desert, and one of them covers, with its scattered ruins of dwellings and shrines, a space of twenty-four square miles.

That Persistent Microbe.

"Mary, have you sterilized the milk?" "Yes, dear." "Have you soaked the beefsteak in antiseptics?" "I have." "Have you burned sulphur in the pantry?" "Of course." "And boiled the ice?" "Why, certainly!" "And notified the undertaker to call in an hour and see how we're getting along?" "Yes." "Then I suppose it will be safe to go ahead and set the table."—Baltimore News. A Most Ingenious Paradox. Watson—Women are always curious. Pearson—My wife isn't curious a bit. Watson—Then she must be a curious sort of woman! The better a man knows you, the easier it becomes for him to find a way to sell you something.