THE FUTURE STEAMSHIP.

WHAT MUST BE DONE TO MAKE A FOUR-DAY GREYHOUND.

The Subject Considered in a Scientific and Practical Way by Prof. J. H. Biles of Glasgow, the Designer of the Paris.

From the Youth's Companion.

I have been asked to look into the future and tell the readers of the *Youth's Companion* what kind of "Atlantic greyhound," as the modern Atlantic liner is called, time is likely to bring us, but I cannot see far enough into the future to discern the greyhound which it conceals. I can only draw on a limited imagination for information on this subject, and try to conceive a future steamer with such improvements as seem not impossible from consideration of the existing art of building.

Let us look back a little and see the road upon which we have come. Many human beings are living who were alive long before steamships first regularly crossed the Atlantic. These vessels at first travelled at a speed of eight or nine "knots," or nautical miles of 6,080 feet per hour. At the beginning of the ten years, 1850-60, the Cunard company had a ship with a speed of eleven and one-half knots an hour. At the end of these ten years they had a thirteen-knot ship.

At the end of the next ten years, 1860-70, the greyhound of the Atlantic was the City of Brussels, and she had a speed of 14½ knots an hour. In 1880 the Arizona, a 16-knot vessel, had made the "shortest time on record," and the next ten years is within the memory of most of the readers of the *Companion*.

At the end of 1889 the City of Paris, now of the well-known American line, broke the record with a 20-knot speed, which she subsequently improved to nearly 21 knots.

Later the record was held by the Cunard steamships Campania and Lucania, with a record of 21¾ knots per hour, and the St. Louis has since made 22½ knots.

Thus we have in the successive decades advances of 3½, 1½, 1½, 1½, and 1 knots respectively. We are half way though another decade, and the speed may be considered as more than two knots in advance of that of its earlier days.

Now, on the basis of these facts, we may prophesy of the future greyhound speed according to our fears or hopes, our whims, or our wishes. The advance in speed between 1840 and 1890 was about 2½ knots per ten years. We have already got an advance of 2½ knots for the present decade in the St. Louis, so that, judging by the past, we have not much advance to look for before the century ends.

But, of course, a continuous gain of speed is not to be looked for. If new steamers run 2½ knots an hour faster every ten years, they would some time cross the ocean in next to no time. Moreover, increase of speed generally means an increased price of the ship, and it also means increased cost of running the ship, and these are things which are likely to stop development of speed.

The sea raises great objections to increase of speed, as may be understood from the fact that the eight-knot ships the navy was less than one-fortieth of that required to drive the Campania and Lucania. Of course, the ships which have so much more power have to be bigger than the slow ones, but not so much bigger as they would have had to be had there not been a constant improvement in engines and boilers.

The improvement has enabled engineers to get much more horse power in the same space and for the same weight than they were formerly able to get, and also to obtain this horse power for much less weight of coal. For instance, the first Cunard steamship completed in the decade 1880-90 had the machinery of one-half the power of that of the Paris, which was completed in 1889. If we say the weight of the machinery of the earlier steamer was about 2,000 tons, that of the Paris would have been 4,000 tons unless some improvement had been made, but it is only about 2,800 tons.

Then as to coal burned. For every four pounds burned on the older ship, only three are required in the Paris to produce the same power. The Paris burns about 2,400 tons in crossing the Atlantic. She would have burned 3,200 tons unless improvements had been made.

Thus we see that to produce a ship of the power of the Paris on the lines of only fifteen years ago would have involved 1,200 tons more for machinery, and 800 tons more for coal than the actual Paris requires. This weight is much more than the weight of the whole cargo of the Paris.

These matters greatly affect the money-making capability of a ship, and it must never be forgotten that there can be no real future for a commercial ship that is not constructed so that it can be made to pay a profit.

Safety in travelling is of prime importance. We know how to subdivide a ship into compartments so that she cannot sink by a blow from another ship. The thing is quite possible and practicable, and some of the boys of to-day, who will be the men of the next generation, will insist that ships which carry many valuable lives shall be made so they will not sink if a hole be knocked out of their sides or bottom by collision.

So much for keeping afloat with a hole knocked through the ship's side. What about running her ashore? There are two chances of this. One is in a fog, when the Captain has mistaken his position. No ship is free from this danger, nor will be as long as it is human to err. There may in the future be some means of obtaining a fog at sea, but the chance of such a discovery being made is not great. Still it is conceivable that our inventors, when they fully understand what condition of the atmosphere really causes fog, may contrive electrical power to dispel it a short distance around a ship.

The other chance of going ashore is by a breakdown of machinery when near the land. This chance becomes smaller every day. Every accident that takes place to machinery is a lesson which teaches something, and as the years go on, the accidents tend to decrease.

We have in recent years seen the greyhounds fitted with two screws and two sets of machinery, which makes total breakdowns still more unlikely. A great American shipbuilder says that the greyhounds of the future will have three screws, and the United States three-screw cruiser Columbia is another recently propelled. If the ships of the future have three screws the chance of total breakdown will be reduced to a very small one.

The other dangers peculiar to the sea are fire and foundering. The former is very small, and will be smaller when the greyhound is built in many compartments. Liability to founder is the smallest of dangers, even in the greyhounds of to-day.

Having provided for safety in the future greyhound by multiplication of compartments and separate sets of machinery, the question of providing comfort for her passengers comes up. Let us compare the available space of a greyhound with that of a dwelling on land. Take the Paris, for example.

The Paris has four decks, or, say, "stories" or "flats." Two of these flats extend the whole length of the ship, and two extend only outside of the machinery space, which is fifty yards long. We have, then, two flats 175 yards long, and two 125 yards long, or in all 600 yards of flat, varying in width from sixty-three feet to nothing.

Now a vessel carries about 1,500 people, so that there are from two to three passengers per yard of length of the flat, or deck, occupied. The most crowded tenement house is not so lacking in space for its inhabitants.

In a ship this space must serve for all purposes of the human beings aboard her. There is no going out of the ship for a walk or ride, a game of baseball. This promenade deck is the pleasure ground of the ship, and on the upper deck is the street where the steerage passengers and crew may air themselves.

All this is included in the space we have already measured, yet a trip in one of these greyhounds is very enjoyable to those not seasick.

But none would object to more space in their private cabins, and in the future greyhound more will be found. Some one may ask, How can cabins be enlarged if the greyhound is to be more subdivided? Instead of more subdivision is wanted more below the water than above, so we can have large spaces in the passenger quarters, some distance above the water, and small ones in the spaces below.

With this enlarged space for accommodation we shall have room for shops, and then passengers may buy many things on board which they may have forgotten to bring with them. They may be able to get news from the shore by some means of communication, so that on a voyage they will not be cut off altogether from the world. But engineers must acknowledge that such means of communication exist only in imagination.

Seasickness? So far nothing has been devised or adopted for completely stopping those motions of a ship at sea which cause such unpleasant feelings. Is it even conceivable that a ship may be made perfectly steady at sea? Let us inquire into this.

We cannot very well hope to prevent the wind from blowing and causing waves, which lift the ship only to drop her, so we must try to make the ship move up and down as little as possible when the waves are large and high. One way is to have the vessel of the smallest possible volume at the water's surface, and for some distance above and below this. A submerged vessel would not rise or fall much even if near the surface, so that if we could get a vessel which is nearly submerged, we should have one free from the objectionable up and down movement.

This kind of vessel would not be very comfortable for those who can stand the sea, so that it would be necessary to have above the sunken hull, and well out of the water a kind of second vessel, upon whose deck the passengers could promenade and the Captain navigate the vessel. But such a vessel might lack certain other necessary qualities, such as power to remain upright, and a large quantity of weight would be required in the bottom of the vessel to give her stability.

Now, weight is the thing which the ship designer is always trying to lessen. He wants the structure and the machinery to be as light as possible. If, therefore, it is necessary to increase the proportionate weight to the sunken part of the ship in order to make her less "lompy" at sea, her speed or carrying capacity must be impaired unless she can be lightened above while weighted below. This is likely to come to pass through the use of aluminum.

Aluminum is one-third of the weight of steel, and at present is about one-half of its strength. When the chemists and metallurgists shall have succeeded in making aluminum or one of its alloys as strong as steel we can then look for a saving of one-half the weight of the steel structure of a modern vessel.

In a ship like the Paris this would mean 2,500 to 3,000 tons, irrespective of any saving in the machinery. This saving of weight would so lighten the ship that she could carry machinery about twice as heavy as the machinery she now carries, and so gain in speed if the power of the added machinery was also doubled.

But it would be very difficult to find room or space in such a vessel as the Paris for machinery of twice the power of hers. And if the power of the machinery were doubled, we should find difficulty in getting room for the additional coal required—nearly twice the amount now carried. It will therefore be necessary to find means of stowing machinery and fuel much more closely than it is at present stowed.

In 1881 an engine of 4,000 horse power occupied 30,000 cubic feet. To-day the same power can be got from two sets of engines occupying 4,000 cubic feet. In the case of the Paris, her engines of 20,000 horse power occupy 100,000 cubic feet, so that if we could put five sets of the 4,000 horse power engines of to-day into the Paris, they would occupy only one-fifth of the space that her present engines take.

It is therefore possible to reduce the proportionate amount of space required for engines by adopting more compact types of engines as they become adapted for large-ship work. If we could double the power of the engines in the Paris, and could provide the necessary fuel to carry her across the Atlantic without adding anything to her total weight, we could increase her speed by nearly one-fifth, or reduce her time by more than a day.

The fuel used at present is coal, which has to be put on board in baskets or barrows by manual labor, and when on board has to be lifted by the firemen with shovels and thrown into the fire. If we could put it on board in a liquid form it would go through pipes to its place of storage in the ship, and be drawn from this place and forced through other pipes into the fires by a steam pump. This would make available for fuel spaces in the ship which at present are useless for carrying coal, and would get over one of the difficulties of finding room for the extra coal if we want extra speed.

Now petroleum may be regarded as liquid coal. When the price of this fuel becomes low enough to admit of its being profitably used, it will take the place of coal with many advantages. One of these is that very much less weight of fuel is required to obtain the same result. Everything points to the adoption of this kind of fuel.

We have already obtained nearly thirty knots per hour in small vessels carrying a small supply of fuel. In the future we may reasonably expect to attain this speed in the Atlantic greyhound, and it will then be possible to reach Europe in four days.

When this comes to pass the editor of the *Companion* may ask some man, now one of the young readers, who shall then have become a leader in steam shipping, to write an article on wonders yet to be, and that present boy may then be able to tell us of many wonders beyond the reach of imagination. But the progress of human knowledge is not bounded by our powers of imagination. Many things to come will make the greyhound of the future a more wonderful thing than even our imagination can conceive.

THE COW PUNCHER'S STORY.

And the Contemptuous Comments It Elicited from the Poet.

"When we were talking about scars the other day," said the returned Cow Puncher, "did I tell you about this one on my finger?"

"Forgot that, I guess," said the Boy's Own Story Writer.

"Hadn't made it up yet, you mean," sneered the Poet. "It ought to be a good one. He's had a week to work it up in."

The poet, it may be well to explain, had been indulging in late suppers of "lob" and beer, a diet which is guaranteed to produce a state of mind favorable to poetry. Almost anything is favorable to poetry provided it is indigestible enough, and "lob" (which is to say lobster) and beer answer these requirements so well that the poet almost invariably counts on them for a sonnet, whereas a Welsh rabbit produces only a quatrain or a rondeau. However, patrons though they may be of modern poetry, "lob" and beer are pretty hard on friendship. Things have been said against the society of poets and of pessimists, taken singly. When it comes to taking both in the same dose it might truly be called allopathic. All of which is necessary to explain the Poet's state of mind. The Cow Puncher was serenely indifferent.

"No," he said reflectively, "it isn't much of a story. If I really put my mind to it I think I could make up a better one; but truth is something after all. It happened this way. I was sitting in our cabin writing a letter——"

"A love letter?" from the Poet.

"Right you are!" said the unabashed Cow Puncher. "And it was a better one than you ever wrote, too! If I could make a collection of the love letters which Uncle Sam brings away from those desserts and mountains out there I'd give you poets and novelists material that would last you one while, and that's straight! You don't know what love is, with your namby pamby feelings based on your calculations as to how much it cost for two people to live in New York!"

The Cow Puncher showed every symptom of being excited, but he disappointed the Poet. The Poet rarely has great emotions himself, but he makes a good deal of copy out of the emotions into which other people are betrayed in his presence. The Cow Puncher suddenly cooled off, however, after a fashion of his own.

"Texas is a great State," he remarked, and lighted a cigarette.

"How about that scar?" said the Boys' Own.

"Well, I was going so tell you. As I said, I was sitting there writing a letter—a love letter—when I felt something sort of tickle my left hand, which was resting on the table. I kind of moved it a little, involuntarily. I didn't think anything about it. Supposed it was a fly. But in a few minutes my finger began to pain me, and when I looked in that direction, there, if you please, was a vinigaroon sitting there and fattening on my blood. What's a vinigaroon? Well, the Mexicans call 'em 'sure death,' and in about five minutes I was ready to believe they deserved the name. My hand swelled and turned black. In a few hours my whole arm was swollen and as black as my coat—or my prospects.

"I didn't know what to do for the blamed thing, and I was miles from everywhere and everything, except the vinegaroon, which I had promptly killed on principle. I smoked and walked and prayed and tried to think of things I had read about what to do in emergencies, but the only course of treatment I could remember was to roll the patient on a barrel. That didn't seem to fit my case, and, besides, who would do the rolling, anyway. The fellows had all gone off to the ranch, where we occasionally put in our Sundays, and my only hope was that some of them would come home during the day instead of waiting until night.

"About the middle of the afternoon an old plainsman came loping along, and I didn't waste time or words in telling him about my difficulty. Those old fellows never took any course in first aid to the injured, but they could give a whole lot of lectures on 'What to Do When You're Got Any Old Thing the Matter with You.' He looked at my hand, and then he said:

"'Oh, yes! we'll fix that all right!'

"He whipped out his knife and whistled happily to himself the while. First he made a lengthwise cut where the bite was, and then he made a crosswise cut in the same spot. Then he pulled the skin well back, so as to leave a good opening, and, taking his powder horn, he poured a good charge of gunpowder into the cut. He kept right on whistling, too, as he scratched a match and waited for it to get into a good blaze. Then he made me hold my hand out at a good distance, touched off the gunpowder, and there I was! He cleaned it out and dressed it, and although I had to hold my hand up in a sling above my head for several days, I'm none the worse for the experience, except for that scar."

The Boys' Own coughed with some embarrassment as the Cow Puncher finished.

"That's very interesting," he said.

"Couldn't you do better than that," growled the Poet, "after a whole week's preparation?"

"No, nor after a whole year's, either!" said the Cow Puncher. "It is over a year since it happened."

"Well," observed the Poet, "as our guileless friend here remarked, it is very interesting. Though I think you might have done better."

The Cow Puncher seemed about to get excited, but suddenly shrugged his shoulders.

"Texas is a great State," was all that he said.

Effect of Æolian Music on a Dog.

A correspondent writes to THE SUN from Utica asking about a dog he had seen upon the trail toward Holland Patent. He said:

"The other day I was out riding my wheel toward Howard Patent, and had just passed Marcy when I heard a dog barking behind me, not as if he was merely howling after the ordinary dog style, but anxiously, as if in pain. I looked around and saw a great big mongrel cur almost rubbing the near hub with his nose, all doubled up at every jump, but not trying to bite the wheel as I could see. I ride a diamond frame, and have five rubber bands on it, which sing like Æolian harps when I ride against the wind. What was the dog up to; did it like the sound the rubber made—didn't it?"

Three dog fanciers who were asked about the matter had each from three to six tales of dogs that howled to music, but none could tell whether it was joyfully or not.

NAVAL RECRUITS SCARCE.

AN ORDEAL WHICH ONLY ONE MAN IN TWELVE CAN PASS.

Enlistment in the Navy Harder Than in the Army—Examination of the Officer of the Deck and the Surgeon—Chances of Promotion—Many More Sailors Needed.

WASHINGTON, Dec. 5.—Frequently within recent years the navy has experienced extreme difficulty in securing a sufficient number of recruits to man the ships properly, and this difficulty has now developed into a problem of considerable magnitude. The number of enlisted men allowed for the navy by law is inadequate for manning the new ships that are put into commission from time to time and for keeping up the old ships' complements. It thus happens that good, serviceable vessels are kept out of commission solely in order that their crews may be utilized to put the new men-of-war into commission. In order to have all the vessels of the United States navy in commission, the force of enlisted men would have to be increased by at least a third, and even such an increase would not give each of the ships an entirely full-handed crew. To put the ships on a war footing, the present enlisted force would have to be more than doubled. The ships of nearly all the great European navies are practically on a war footing all the time, so that it frequently happens that a third-rate British cruiser anchored in foreign waters alongside an American cruiser of the first class has quite as large a complement of enlisted men as is carried by the American ship.

But it is in maintaining the comparatively contracted force of the navy as it stands that the department is now having an unusual amount of trouble, in spite of the wide-open gangways of the receiving ships and the recruiting cruises of individual ships along the Eastern and Western coasts. When times are bad plenty of young men present themselves aboard the receiving ships for enlistment in the navy. About eleven-twelfths of them discover their mistake as soon as they get over the receiving ships' gangways, for, using the average for several years, only one man in a dozen who present themselves for enlistment in the navy is accepted. It is almost as hard to ship in the navy as a landsman as it is to enlist in the army as a soldier, and a good many men who have had a try at the latter task aver that it is a good deal easier thing to pick up a job in civil life than it is to get into the soldier uniform of Uncle Sam. The proportion of rejections of applicants for enlistment on board receiving ships has become so large that there is authority for the statement that the Navy Department is seriously contemplating the elimination of certain rigid physical and mental requirements.

Besides the four receiving ships that are constantly in commission for the enlistment of naval recruits—the two most important of these being the Vermont, at the New York Navy Yard, and the Independence, at the Mare Island Navy Yard—American warships are constantly shipping men, both in home and foreign ports, to fill gaps in crews. The commanding officers of American men-of-war are permitted by the Navy Department to fill vacancies in their crews by shipping men in any part of the world. Under certain circumstances they are even allowed to waive some of the requirements, especially the one which provides that no man shall be enlisted in the United States naval service who cannot speak and read the English language. Wardrooms of American men-of-war would have to worry along without the invaluable Chinese and Japanese messroom attendants and galley cooks if this rule were strictly observed.

New York city furnishes more recruits to the navy than any other city of the country. It is no exaggeration to say that in general intelligence and adaptability and the capacity to quickly grasp a situation these New York recruits easily excel all the other recruits who enter the naval service at the rating of landsmen. It is as landsmen that the great majority of American naval recruits are shipped, for experienced seamen of the merchant marine have also wo secured to fight ship of the American naval service. The difidence of merchant seamen about entering the American naval service makes an extraordinary amount of work on board American men-of-war for officers and petty officers in the matter of filling their ranks in good sea shape. No other navy in the world is compelled to begin with so much raw material.

The general appearance of the man who wishes to go into the naval service as a landsman is a thing that is likely to tell largely for or against him when he goes over the receiving ship's gangway and is examined by the officer of the deck. The day has long since gone by when a man just emerged from the throes of delirium tremens and everywhere discredited could ship in the navy with very little parley with the receiving officer as to his history, habits, occupation, and general fitness. The man who now accosts an officer of a receiving ship deck with a view to getting on a suit of bluejacket clothes is met with a very critical examination by that gentleman of the quarter deck, and it is an examination that cannot be satisfactorily borne by the greater number of men who regard a cruise in the navy as the last resort of the social outcast. What is his idea in entering the navy? Is it simply to get shelter—a hammock and three square meals a day? Does he know that he stands a fair chance of being killed in the fighting killed? Would he be willing to fight? Has he ever been under discipline? What was the last job he held? Why is he not holding it now? Why was he discharged? Has he ever been in jail? Has he ever been in an inebriate asylum? Does he know that he is to be a landsman in the navy is not all cakes and ale? Does he carry in his own mind that he has sufficient stamina to endure a rough life uncomplainingly? Does he know what that flag waving at the mizzen stands for? If he had a relative or several of them serving on board the ships of countries with which the United States happened to be engaged in naval wars, would he still unreservedly fight for the honor of the American flag? Hard questions to answer, some of these that are propounded by officers of the deck and recruiting officers for the testing of the mental strength and character of confused young men who come to the office of a man-of-war is as strange a thing to treat as would be to have been a Babylonian hanging garden to a Viking and whose only reward for running this gauntlet is the securing of a job that pays $16 a month. Men, however, who have served themselves first in the navy and then generally want to get in badly, and so they are quickly coached in what these questions are hurled at them. The stupid man never gets past the officer of the receiving ship deck. He finds himself over the gangway and ashore before he has finished the first question he has been said to him. The man whose appearance is against him is asked to reply to questions that are designedly impossible, or almost impossible, of intelligent answers. He is thus let down easily without having his feelings hurt.

The ordeal he undergoes as he passes the visual and oral examination of the officer of the deck and the recruiting officer is still very much on a lee shore. The recruiting officer turns him over to the examining surgeon. The examining surgeon is the rock upon which the great majority of applicants for enlistment in the United States navy go to pieces. In many respects the examination of the naval recruit as to his physique is more severe than that through which the candidate for enlistment in the army is put. The slightest physical defect, such as a sanitary scar, which the applicant himself does not know that he possesses, is sufficient ground for the candidate's immediate rejection. The tests given to his eyesight and hearing are such as very few men can successfully pass. The number of men who discover for the first time, when they are put through the naval surgeon's examination, that they are color blind or a trifle hard of hearing, is astonishing. Stripping big men with superb physiques ascertain that there is something radically wrong with their heart or lungs, although they themselves may never have known anything about it. The candidate is required to hop around the deck of the sick bay in which he is examined, and if, after this violent, one-leg exertion, his heart beats with undue rapidity, or he breathes with extra sterterousness, he is done for so far as getting into the navy is concerned. Certain naval surgeons are particularly severe in their examinations as to heart action, others as to weak lungs, others as to hearing, and so on, so that the old sailors of the navy, when they ship again, they are compelled to be reexamined every time they enlist, to learn what receiving ship to go to in order to happen upon a surgeon who is likely to "go light" on some minor disorder or other from which they may be suffering. The would-be naval recruit, however, necessarily does not possess this valuable knowledge as to the characteristics of naval surgeons, and has therefore to take his chances of a reexamination, which chances, as shown by the rejection statistics, are very small.

After having passed the doctor successfully, the candidate is vaccinated by the receiving ship apothecary, and, relothing himself, he goes again before the recruiting officer, who is usually the ship's executive. He receives another careful scrutiny and another verbal examination, and the discomforts and hardships that make up so large a part in the life of men forward are dwelt upon with graphic, depressing, exaggerated effect. Recruiting officers rather enjoy doing sketches of this sort with very large black crayons, in order to study the deepening expressions of consternation which overspread most candidates' faces as the heavy lines are filled in. If, however, the candidate is beyond the stampeding stage, the recruiting officer promptly tells him to hold up his right hand, and he is sworn in without more ado for a three years' cruise. After being carefully measured according to the Bertillon system, he is turned over to the paymaster's clerk to draw his uniforms and small stores. The blue jacket, unlike the soldier, is obliged to pay for his own clothing. A newly enlisted landsman has to draw about $40 worth of uniforms and other necessary gear in order to permit him to make a proper showing at inspections, and unless he has enough money to pay cash, the cost is taken from his monthly pay of $16. He thus draws no money from the Government for his services for three months, nor is he allowed to have shore liberty until the goods he has drawn from the paymaster's stores are entirely paid for. It does not happen once in a thousand times that a newly enlisted landsman has enough funds in hand when he ships to cover the cost of the clothes he draws from the paymaster.

Rigged out in his new bluejacket uniform, and generally feeling very foolish and ridiculous in it, the green landsman is turned loose on the "Guardo," the sailors' name for the receiving ship. He is not required to do anything for a day or so, in order that the feeling of newness which usually possesses him may have a chance to wear off. His first night in a hammock, and perhaps several times out of it during the night, is a dismal experience, and, all in all, the first few days of the landsman's life aboard a guardo are not in the nature of things hilariously happy. For the gloom which may enshroud him amid surroundings so strange there is some compensation in the fact that mess-call goes three times a day, and guardo meals are always "squares" in comparison with the less attractive food served out in landsmen's messes on cruising ships. After a couple of days of this comparative tranquillity the landsman in the new uniform is likely to hear his name sung out by the gangway boatswain's mate for exercise in a working party at turn to in the morning, and from that time on he is kept steadily employed on board the receiving ship or around the navy yard, doing heavy and not always cleanly chores under the direction of old twenty-years' service men, until he is regularly assigned to a vessel in active cruising service. Naval recruits are rarely kept aboard a receiving ship more than a month.

Together with a good-sized batch of recruits, shouldering their hammocks and ditty bags and boxes, the landsman is sent to the ship which is likely to be his only home for three years. As the new men go over the gangway of the ship to which they are assigned, they are subjected to a close, summary, and critical inspection by the old-timers among the ship's company, who make an invariable practice to assemble on these occasions in order to make the recruits feel as small and uncomfortable as possible as they stand on the half deck waiting for their names to be called out by the officer of the deck. The landsman is then taken in hand by the master-at-arms, and gets a ship's number, by which he is more frequently to be known to the officers than by his name. He learns where to stow his clothing and hammock, gets a mess-kit, and is in the vortex of life on a man of war. It depends largely upon himself whether he makes a success of it, and eventually gets the brass buttons of a chief petty officer, with the accompanying ease and comparative dignity of a man who holds such a position, or a petty officer, or aligns himself with the opposition party of slackers and no-accounts who are deserting or getting themselves "beached" in various parts of the world every day in the year. The landsman has to work hard for his $16 a month, and his work is not any more dignity than is the preparation of the food he eats, but the man who amounts to anything wears the single white band on the sleeves of his shirt for any great length of time. It has frequently happened that clever fellows who have gone into the American navy as landsmen have finished their first cruise as chief petty officers, drawing from $55 to $70 a month.

M'KINLEY AND HIS VISITORS.

How the President-Elect Receives the Up-Sitters in Canton.

From the St. Louis Globe-Democrat.

CANTON, O., Nov. 27.—He was a travelling man who had spent part of his life in South Africa. Half a dozen visits had been made by him in a professional way to the McKinley homestead on North Market street. "Ah," he remarked one day, "the up-sitters seem to have taken possession of the Major's house." I asked, in the innocence of ignorance, what an up-sitter was. The travelled man told me that among the Boer farmers of the Transvaal the custom of the lovelorn swains was to up-sit with the object of their affections when the wooing reached that stage where they must know their fate. "These fellows," he added, "are evidently wooing the Major for office—I find them there night and morning and morning and night."

Not all these persons who crowd Major McKinley's library are themselves seeking office. Almost any day one can find there the confidential adviser, the Cabinet tinker, the mysterious visitor, and the man who knows it all. They are the original McKinley men, who love to sit and fight the battles over again. The Major is cordial and hospitable. He chats with his visitors, listens to their recitals, and has his stenographer make a note of their suggestions, but it is all in public. His time is too valuable for private interviews with these callers, who come and stay and hint and advise. A blunt request for a private interview may secure a courteous two minutes in the hall, but if it be an application for office, that must be filed in the regular way and go in one of the big boxes which Private Secretary Boyle has provided for these cases. The confidential adviser may give his views on the tariff, but he must take the company into his confidence. The mysterious visitor may hide his identity among other mysterious visitors, but he cannot cover his presence in some obscure corner of the McKinley residence. The Cabinet tinker finds the atmosphere so frigid that after one attempt he knocks off work.

There are more ways into Canton than out of Canton. Visitors who come hoping to keep their presence a secret discover how easy it is to get in without being known and how hard it is to get out of town. Some of them have not learned that the President-elect dislikes the appearance of secrecy. Whatever their business, Major McKinley is willing that their presence shall be known. A prominent member of the Cabinet was here, and he is there any effort to conceal the movements of persons who are in confidential relations with him. Cousin William Osborne flits in and out from the East, the bearer of important messages, and greets everybody in town while he is here. Brother Abner McKinley runs out from New York for a brief interval, and talks with freedom on his own opinion of the policy of the Administration. Mark Hanna comes down from Cleveland, usually with a delegation of politicians of prominence. Their coming is known in advance, and they are at liberty to tell all they think they know. Sometimes Mr. Hanna will ask the obliging railroad men to hold the train two or three minutes while he allows himself to be pumped.

Occasionally a visitor of some note will come unannounced, and will go away with assurances to the public that he has not been invited into the Cabinet, though he is willing to serve the country in any position to which President McKinley may call him. Congressmen, National Committeemen, and State leaders may go away to chew up their own fingers and spit out wind enough to be done on the tariff and financial legislation with what the McKinley Administration may or may not want done. Whether their unofficial views are accurate or not no shade of annoyance passes over the exterior of Major McKinley.

The Major is is unquestionably a good listener. He keeps his own counsel and lets public sentiment form itself. Usually to the visitors who are entitled to his confidence he presents both sides of every question. If they are members of Congress they are invited to give their views freely on the subjects of tariff legislation and an extra session. The office-seekers give him the least concern. Nobody is offended, yet nobody is permitted to press questions of patronage before he has himself taken office. I have heard that a considerable number of those holding positions under President Cleveland, who are not protected by the civil service are putting in applications to be retained, on the ground that they are gold-standard Democrats. Probably at a later day some general policy will be adopted with regard to this class of office holders, but for the present their applications are treated precisely like the applications of those who seek office. They are simply filed away for future reference.

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A RECORD OF BRUTALITY.

BLACK AND BLOODY CATALOGUE OF SPANISH ATROCITIES.

American Victims from the Time of Santa Anna to That of Weyler—The Recent Slaughter of Col. Crittenden and His Fifty Men—The Virginius Massacre.

In order fully to understand the character of the dominant and official class of Spain it is hardly necessary to go back to the original conquest of Cuba, when Spanish soldiers perpetrated the most diabolic cruelties upon an unarmed and amiable people who had offered no resistance to their occupation of the island, nor to the atrocities of Cortez in Mexico, nor of Pizarro in Peru. We may omit the black and bloody catalogue of those crimes and come at once to the treatment of American citizens. After Mexico had gained her independence, Santa Anna, a Spanish dictator, overthrew the Constitution of the country, and at the head of a large army attempted to suppress an insurrection in Texas, which had revolted against his despotic methods. The small army of Texan patriots was largely recruited from the United States. Many of our young men, inflamed by his butcheries and inspired by an ardent love of liberty, formed companies and marched to the aid of their kindred who were struggling for independence. Santa Anna took San Antonio, stormed the little garrison in the Alamo, and, after a desperate struggle, shot down every one within its walls, with the exception of one woman and child, who would have shared the same fate had they not been covered by the dead bodies of the garrison. Not content with this butchery, he went among the slain and drove his dagger to the hilt into the bodies of the dead and the wounded. Shortly afterward he encountered a small body composed of Texans, Georgians, and Alabamians, who successfully resisted his attack until their ammunition was exhausted, when they surrendered as prisoners of war. Dr. Shackelford, who commanded this small band, being a skilful surgeon, rendered valuable service to the wounded Mexicans after the battle, as well as to his own followers. Though Santa Anna promised the survivors that they might return to the United States, all, with the exception of Shackelford, were marched out and shot. Among the victims was Shackelford's own son. In consideration of the services rendered by his father to wounded Mexicans Santa Anna offered to spare the life of his son also. Shackleford approached the lad and informed him of the offer.

"I have enlisted all your comrades," said the father, "upon the terms that I would treat each of them as I would treat my own son. They are ordered to be shot; and, though your life is offered to me, I cannot accept it without betraying my word. I will leave the question for your decision."

The brave lad instantly declined the proposition, and died with his comrades. Among the captives on another occasion was young Crittenden of Kentucky. Santa Anna had ordered one man out of every ten to be shot. Black and white beans were put in a hat and each prisoner was required to draw. Crittenden got a white bean, which entitled him to exemption; but, seeing that a comrade next to him had drawn a black one, he turned to him and said:

"You have a wife and children; I have none. Take this bean and give me yours."

The proposition was reluctantly accepted and Crittenden took the condemned comrade's place. The execution, however, was deferred, and through the interposition of John J. Crittenden and influential friends at Washington his life was saved.

Sir Philip Sidney has been immortalized for giving his cup, containing his last drop of water, to a wounded comrade when he himself was wounded unto death. But the no less noble act of Crittenden has never been praised in poetry or in song, and has never even been heard of by a large number of his countrymen.

It will be seen that neither the humanity, the chivalry, nor the generosity of Spanish Generals had been improved from the time of Cortez to that of Santa Anna; nor has there been any improvement from Santa Anna to Weyler.

When Lopez made his last effort to liberate Cuba in 1851, his command of 500 men was composed of citizens of the United States, including scions of many of the best-known families of the South. Hawkins, Pickett, and William Crittenden, all of Kentucky, were his lieutenants, the last two being graduates of West Point; and Crittenden, if not Pickett also, had resigned his commission in the United States army to join the enterprise. Lopez, with the larger part of the little army, marched into the interior of the island, leaving Crittenden in command of 150 men to guard their supplies and baggage. A Spanish army of several thousand men attacked Lopez and captured or dispersed his followers. An attack was then made on Crittenden's command, which was successfully resisted, only to be followed by two other attacks with an increased force. The 150 had been reduced by casualties to 50, when the survivors took to their small boats and put to sea. All were captured by a Spanish gunboat. They were put in irons, treated with the most diabolic brutality, hurried to Havana, their arms corded around the wrists so tightly as to cause their hands to swell double their natural size; and, without any form of trial, even by a military tribunal, were condemned to be shot. Half an hour before their execution their wrists were unbound, and permission was given to write to their families. Col. Crittenden, who was captured on board the Lopez, and therefore indignant that he had not come to his rescue, wrote to Dr. Lucien Hensley as follows:

DEAR LUCIEN—In half an hour I, with fifty others, am to be shot. We were taken prisoners yesterday. We were in small boats. Gen. Lopez separated the balance of the command in two lots, with one about 100; was attacked by two battalions of infantry and one company of horse. The odds were too great, and, strange to tell, I was not furnished with a single musket or pistol. Not a shot was fired on our side. I have not the heart to write to any of my family. If the truth ever comes out you will find that I did my duty. Many Americans, citizens, have been secretly murdered without any form or pretence of trial. A still larger number have been robbed by Spanish officials and soldiers. Others have been banished for no offence whatever, and yet the relations of the two Governments are said to be "cordial." If there is any cordiality on the part of our Government toward Spain it is a disgrace to our administration.

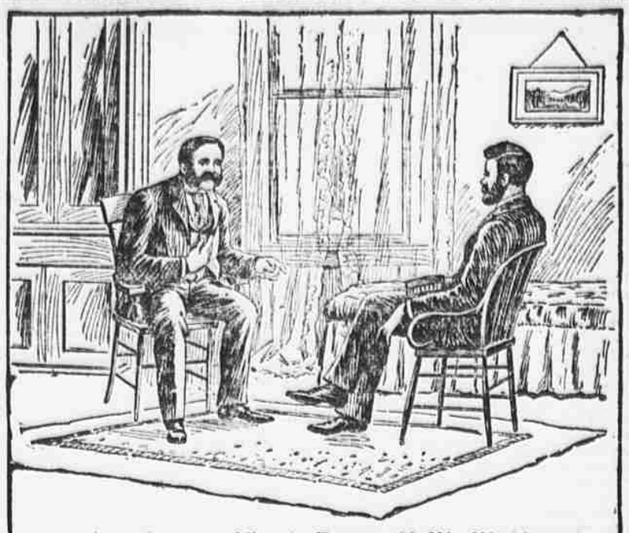
POMP ON THE INSTALLMENT PLAN.

Prince Nikita Sensitive His Reputation Regardless of Expense.

Like several other princely spendthrifts in Europe, Nikita of Montenegro is as generous in times of scarcity as in times of plenty. His civil list of $40,000 a year is to his creditors something like the great prize in a lottery; the lucky one gets it and the rest get nothing. In Montenegro this kind of princely bankruptcy encounters few obstacles, for Nikita rules with the aid of dungeons and swords for the rebellious creditor, and is totally callous to the appeals and remonstrances of the unpaid. On foreign soil the Prince has been able to make both ends meet, because in his every trip abroad until this year he has passed some time in St. Petersburg, where the Czar has replenished his purse.

The one trip which did not lead him to his Russian source of supplies was that to Italy to attend the wedding of his daughter and the Italian Crown Prince. As father-in-law of the future King of Italy, Nikita doubtless felt it incumbent upon him to do the grand thing, so he scattered costly decorations, stars, crosses, &c., hither and thither among the Italian courtiers. He let no available item escape, and consequently had an order for any quantity of Montenegrin decorative jewelry to be made by the Home goldsmiths. To one firm he gave an order for $2,000 worth of decorations, and to another one for $1,000 worth. A third received decorations to make up $8,000 worth. This latter firm was in luck, for, having the smallest bill, it was able to collect the money at once upon delivering the stars and crosses.

The other two firms could not collect their bills, and therefore refused to deliver the goods. Hence great indignation on the part of his Montenegrin Highness and embarrassment on the part of King Humbert and his court. Appeals to the two suspicious firms were vain; they had heard of Nikita's ways, and were not to be humbugged. Six months ally the Italian court was scandal in chief, obliged to interfere to save the dignity of the allied house of Montenegro, and after Nikita had paid $6,000 to one firm and $7,500 to the other, guaranteed the payment of the balance on the installment plan. The stars and garters were then delivered, the Italian court was decorated plentifully according to programme, and his Highness of the Balkans went home in the happy consciousness that when he should default on his future installments, the Italian court would accept its burdens and pay the bill.



A gentleman residing in T street, N. W., Washington, D. C., asserts that he suffered for many years with dyspepsia, indigestion and biliousness. He tried every known remedy, consulted many physicians with the hope of getting cured or even relief, but nothing seemed to relieve him. After meals he would feel as if a ball of lead was lodged in his stomach, tired and listless, as though life was scarcely worth living. Finally he was attracted to the ad of

RIPANS TABULES

and concluded to try them. After taking the first two or three he was surprised to find the relief they gave and soon he felt like a new man. He has never been without Ripans Tabules since, nor has he suffered since.

which it should end, will be emblazoned on the banners of the hosts which the nation will send to do what another Crittenden of the same lineage dared to attempt at an earlier date and beyond our limits, but with an independent force. The latter sought to spread our institutions abroad, the others to preserve them at home."

The execution of the crew and passengers of the Virginius in 1873 was even more cold-blooded. The Virginius was sailing on the high seas under the flag of the United States. But she was captured by a Spanish gunboat, carried to Santiago, and, fearing the home Government would prevent the execution, four of her passengers were shot next morning at 6 o'clock. An officer of a British schooner, who witnessed the execution, gave the following account of it:

"The executioners demanded that these victims should kneel