# British Naval Gunnery a Farce: Old Guns and Obsolete Ships.

### Experts Say That Jack Tars Cannot Handle the Guns Any Better Than Sschool Girls.

By W. B. NORTHROP.

One of the most prominent generals in England has recently testified on oath that the naval gunners employed in the recent South African war could not shoot as well as school girls.

Naturally, the remark has aroused a storm of indignation among those who still believe that "Britannia rules the waves." The navy with England is her sensitive spot. "Say whatever you like about us; but don't criticize our navy," has been a pet phrase for a long time.

Up to this time England's vast array of 493 warships—of various kinds—has hypnotized the world into a belief that if England went to war with a first-class power the navy would decide the matter in the favor of England out of hand.

England spends upwards of $114,000,000 a year on her navy, employing more than 110,000 officers and men on the high seas. She builds new warships every year at an average expenditure of $5,000,000; and yet, General Sir Archibald Hunter has the temerity to come forward with the statement that naval gunners are not worth their salt—or rather, their powder and shot.

NAVY AS BAD AS ARMY.

A Royal Commission has just reported on the efficiency of the British Army. It has been proved that everything that an army needed in order to make it a fighting force the British army in South Africa lacked. It had, however, everything from useless rifles to worse than useless generals. In certain quarters the cry has been raised for a Royal Commission to investigate the condition of the British navy, which has so long boasted its splendid power. It is predicted that were the subject rigidly investigated, the navy would fare even worse than the army.

It is pointed out that it is nearly a hundred years since the navy of England was brought into action to any serious extent. During that time, while great improvements have been made, there still exists to-day in the British navy many things that need pruning.

On some of the ships there are still in use great ten-inch muzzle-loading guns which are utterly useless in these days of quick-firing heavy guns. On all of the British training ships, and in all the gunnery schools, it is the universal practice to teach the men how to handle muzzle-loading guns, and the crudest kinds of methods are in force at many of the supposedly "crack" gunnery schools in Great Britain.

GUNNERS CANNOT AIM.

That English naval gunners cannot hit anything has created the most widespread astonishment. At first, English people were inclined to look upon the statement as an exaggeration; but when one of their own generals testified that the famous naval gunners at Ladysmith never succeeded in doing any damage to the Boers, the British tax-payers who have been paying out money for the navy have begun to ask what it all means.

That a Royal Commission will be appointed to inquire into the inefficient state of the navy there is little doubt. This report will be kept secret no doubt, as it is now realized that England has lost enormous prestige over the recent reports of its War Commission.

The British army has gained enormously by its South African experience; but it needed the war to reveal its faults and help to bring it up to a state of usefulness.

But the navy has had so little to do within recent years that it is feared it would be found utterly lacking were England to engage in war with any first-class European power to-day.

SOME "MORERN" TRAINING SHIPS.

The methods employed in training boys and young sailors for the British navy are said to be at least twenty years behind the age. Most of the ships themselves on which this training is given are of a pattern that has not been seen on the high seas for fifty years, and the guns and naval equipment are altogether out of date.

The age of some of these old training ships is almost incredible. For instance, the St. Vincent, a ship of 4,672 tons, now in use at Portsmouth, was built in 1815, which is just 87 years ago; while the Daedalus, a 1,447 ton ship now used as a drill ship for the Royal Naval Reserve, came into commission as long ago as 1828. Among other ships used now for training schools are the Black Prince, built in 1861; Boscawen, 1841; Britannia, 1860; Cambridge, 1858; Lion, 1847; President, 1830; while the Caledonia came into being in 1810—ninety-three years ago.

NELSON'S FLAGSHIP USED.

England certainly has great respect for the antique, but when it comes to training sailors for modern war by obsolete methods, it certainly seems carrying the love for the ancient rather far. For instance, one of the regularly commissioned ships of the British navy to-day is the Victory at Portsmouth harbor.

The Victory was Nelson's flagship at the famous battle of Trafalgar. She was built in 1765, is a ship of 2,164 tons, and carries to-day 28 guns on an old a pattern as possible. Still, she is the flagship at Portsmouth harbor. The Admiral who commands her is Sir C. F. Hotham, Knight of the Grand Cross of the Royal Victorian Order while her captain is E. P. Jones, commander of the Bath.

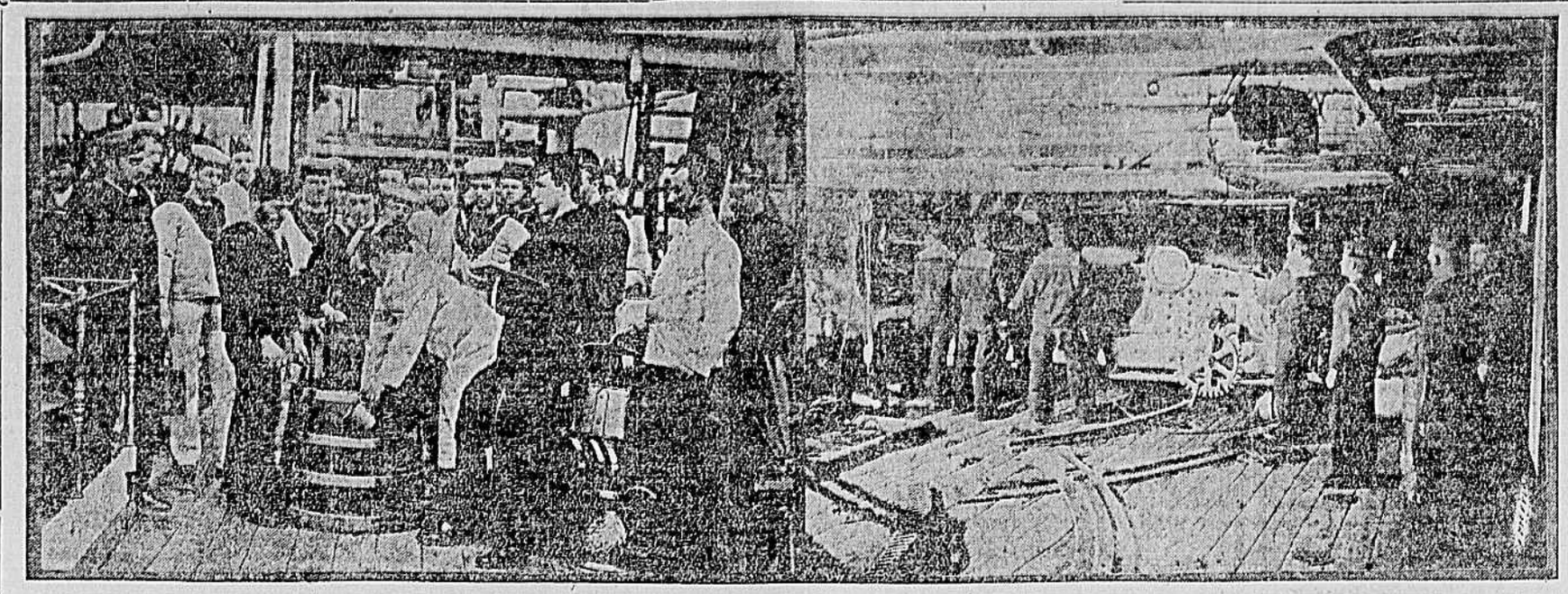
Critics of the navy in England to-day point out that the winning of the battle of Trafalgar—which broke Napoleon's power—was no reason why the British navy should have gone to sleep ever since. Dire warnings are heard from alarmist camps that before very long England will wake up and find herself with a navy. The country depends so absolutely on the navy for its food supply—never having more than six weeks' food supply ahead—that when faith in the navy is shaken things begin to look serious.

It is said that it is these adverse criticisms, both of the army and the navy, that have caused such a big slump in British consols recently, they having been at a lower point than has been known since the Crimean war.

PARLIAMENT IS HANDICAPPED.

One of the great causes for dissatisfaction with naval affairs consists in the fact that there are to-day—since the withdrawal from Parliament of Lord Charles Beresford—no naval men in the House of Commons. Hence when important subjects vitally affecting the navy arise in the Commons, they are dealt with by landsmen who, half the time, do not know a keel from a waterspout. In every other department of the House of Commons, except that dealing with naval affairs, there are experts who know their business. With the navy, however, absolute ignorance prevails, and, as a consequence, naval men have no use for Parliament.

Occasionally such men as Sir Charles Dilke will ask a few pointed questions on naval affairs; but, as a rule, there being no naval men to answer, the subjects are promptly dropped. Last year 10,000 rounds of ammunition were wasted on a single British battleship in the course of an hour's practice; and yet when the matter came up for inquiry in the House of Commons, those who "wanted to know" obtained no satisfaction.



TWO FAMILIAR SCENES ON ONE OF JOHN BULL'S WARSHIPS.

### English Tax-Payers are Angry at Facts Brought Out Which Show Britannia Weak on Waves.

The British Admiralty has committed some very serious blunders recently, one of which was equipping a large number of naval guns with defective sights. The horizontal wires inside the telescope sights were found to be so thick that at the distance of 1,000 yards they would eclipse a trench or a house.

The gun telescopes had all to be taken to pieces and new ones substituted before the guns could be made to do any effective shooting, even with the best men behind them. Had this condition arisen in a modern war with a first-class power, England would have suffered terribly from such carelessness.

In recent practice the flagship of the Australian squadron, the Royal Arthur—a modern first-class cruiser built in 1891—missed the target every time with her big guns, not having been able to score once out of an innumerable number of shots fired from big guns at heavy expense. It was the same case with the Speedy, of the Mediterranean squadron, built in 1893. She could never hit anything, though supposed to be one of the best boats in the navy with a speed of 20.21 knots an hour.

THE WAY THEY SHOOT.

At Whale Island, Portsmouth harbor—one of the biggest and supposedly best equipped gunnery stations in England—gun practice within the last five years has been simply wretched.

The guns are not used "as they are," but all the big weapons have been fitted with rifle barrels, and the shooting is at small targets laced about thirty yards away. These targets are tiny silhouettes of men-o'-war, not more than a foot high. Practice of this kind, with big guns, is practically useless so far as actual shooting is concerned.

Men at Whale Island are taught to handle old-fashioned muzzle-loaders, and many of these men, when they go on board a first-class battleship of modern type—of which England has some splendid ones, let it be said—do not know what to do with themselves.

When England took so long to "wipe out" the Boers the world was astonished. If England went to war to-day with a first-class naval power, the world would, perhaps, be still further astonished by the discovery that the boasted British navy, built at such an immense cost, and manned so extensively, was lacking in both guns and gunners of a modern type.—(Copyright, 1903, by Central News and Press Exchange).

# The Tattlings of a Retired Politician.

## HOW THE DEAR PEOPLE FORGET.

### By Forrest Crissey, Author of the "Country Boy."

Dear Ned.—You seem to feel that the bill you have put through has given you a mechanic's lien for life on the franchises of your constituents. Perhaps, it has. But let me tell you this: A boy who has played hookey and wound up with a secret raid on the jam closet is a novice in the gentle art of forgetting, compared with the average constituency. Any ordinary bunch of voters can forget to remember more things than a village money lender can remember to forget when making up a schedule of personal property, for the tax assessor. The affections of a frisky girl in her first year of boarding school life are sermons in constancy alongside the fluctuations which are recorded at the ballot box.

Of course, the fellows who are pushing for the appropriation which landed you have told you that the passage of your bill would make you eternally solid with the horny handed voters in your district; that as long as grass continued to grow and water to run in the old Eighth you could just say "thumbs up" and the votes would be yours. Then, they pounded you on the back, gave you a stag dinner and presented you with a gold watch engraved with sentiments from your "grateful constituents." I've had several of these and my experience is that they'll run longer without cleaning than most constituencies will without a change of heart.

This cow country out here hasn't any more than its share of quitters, but a little incident just occurred over at Pinhole that sheds light on the subject of the amount of faith a man is warranted in placing on the political constancy of a constituency to which he has given the one thing that is desired above all others. Now, Pinhole isn't strong on the traditional means of grace; it's short on churches; the W. C. T. U. and Y. M. C. A. and other alphabetical agencies of civilization hasn't been able to cut a very wide swath there. But for all that there is a good deal doing in Pinhole right along and the people have been accustomed to point with pride to the fact that it bars, faro banks and the other local institutions are the best in the State and never turn away the enterprising patron at any hour of the day or night.

At the last session of the Legislature, however, there was a tidal wave of moral sentiment that made the boys hold their ears to the rails and listen. A good many of them concluded that the "water wagon" was coming in earnest, and they couldn't see much difference between a blue ribbon and a ballot. The W. C. T. U. forces certainly did mask a powerful showing, and [illegible] some mighty restrictive legislation would go through. That was the time when "Big Mike," the member from Pinhole, took off his coat and began to saw wood. He knew that his town would look like a Sunday-school after that kind of a legislation had begun to get in its saving work. A big delegation of business men came from Pinhole to make a showing. They were sure scared and begged Mike to turn back the enemy at any cost. He buckled right down to business, sacrificed everything else, and traded right and left for anything that would cut into the votes of the reform party. And he was a shrewd trader, too!

If the missionaries who had gone out to spread the gospel had worked half as hard as Big Mike, there wouldn't be an unconverted heathen on the face of the earth. If he had sworn not to eat or sleep until he had killed that bill, he couldn't have hustled harder. Day and night he was out on the rampage, cutting out a member from the reform bunch at every possible opportunity and putting the Pinhole brand on him.

When the final round-up came, he had picked up enough strays, by hard riding, to defeat the day. Judging by the noise that the Pinhole delegation made over him, you would have expected to see Big Mike sent to Congress. They loosened the underpinning of the Capitol building and painted the town until it looked like a horse show poster. And the whole thing was done over again when Mike made his triumphal return to his own town. All the brass bands in the country were there, and the blow-out that was in his honor went down in history.

A few months later a young stranger, with a baritone speaking voice, a smile that made the dogs wag their tails and a string of good stories, struck the town and opened a law office. When the municipal election came around the opposition ticket nominated him for Mayor. Then the "business element" waited on "Big Mike" and asked him to run in order to "save the day." They assured him that he was the one man who could snuff out the young invader without batting an eye. Of course, being Mayor of Pinhole looked like potatoes to a man who had held the center of the stage through a whole legislative session, and who had his eye on a seat in the State Senate. But the boys begged him to make the sacrifice and urged that the mere use of his name would put the other man out of the running. Finally he yielded. The music which had celebrated his triumphal return was still sounding in his ears and he looked upon the whole municipal campaign as a matter of form. In fact, he didn't consider it necessary even to remind the people that he had given them the one thing they wanted. They would never forget that! So he just kept on handing out hardware to his customers while the young lawyer worked his smile and his stories from one end of the street to the other.

Somehow, before anybody particularly realized it, there was a sort of general inquiry as to whether Big Mike ever would be able to satisfy his appretite for office. Even one or two of the men who had been in the Pinhole delegations that went up to the capital, during the session, for the purpose of holding up Big Mike's hands and giving him moral support, were heard to insinuate that the political leader of the business element so hated to see an office get past him that he'd be running for justice of the peace or constable next, rather than have some other fellow fill the place.

Then, the women and the dudes of Pinhole society began to whisper that it would be real nice to have a mayor who didn't spit on his shirt bosom and who used at least three handkerchiefs in a week.

Well, before the polls opened you could walk from one end of the street to the other without hearing a solitary word on the subject of how Big Mike had stamped a whole legislature and saved Pinhole from being crushed under the wheels of the water wagon bill. But every time you listened in a little political talk you were dead sure to hear how many spots were once counted on Big Mike's shirt bosom and how tiresome a thing it is to see a man make a political glutton of himself.

Big Mike didn't hear much of this talk and he simply snorted with complaisant content at the stray fragments of it that did reach his ears. He allowed that a man could wear a shirt front of solid plug fringed with fine-cut if he could only give his constituents their heart's desire and give it to 'em quick—when they called for it. The people, he said, knew all about him and he knew the people of Pinhole so well that he didn't have to get out and run a campaign with a dude on a shirt front issue. A bear on a floor sanded with carpet sacks would be a calm and peaceful object compared with Big Mike when the ballots were counted, that night and the election of the smooth young lawyer announced.

Mike plowed up both sides of the street in his wrath, sold out his business and moved into another frontier town, in an adjoining district, which had been as much benefited by his work in the Legislature as had Pinhole. Then he started in for a long campaign. He is working at it now, day and night, and you may depend upon it that he will be back again in the Legislature with a long knife out for any legislation that the Pinhole district may want. He says that he is now strict may want. He says that he is now a reformer—and that the first thing he proposes to reform is the memory of his dear old friends, the people of Pinhole.

All this, I admit, is rather discouraging to a man who has put up really a great fight for a good measure that ought to entitle him to an eternal mortgage on the support of his district for anything he may choose to ask. However, there may be a sneaking streak of satisfaction to some fellows in the fact that a constituency is about as quick to forget his sins and blunders as his triumps of statesmanship in their behalf. Perhaps you have forgotten the episode of "Gumshoe Smith," in the session when you were laid off. Let me jog your memory. Gumshoe represented one of the river districts. Although he had a whole lot of farmers in his bailiwick, he was out for any substantial assets he could fasten on to without making too much noise about it. And what's more, he didn't hold himself at a cheap price either. He always stuck for something worth while and if he did not get it he was a bad man to deal with. He had the courage of his immoral convictions and showed a dare-devil nerve when any of the corporate interests tried to throw him.

One of the biggest franchise bills that came up during the session was engineered by a transplanted New England Yankee, who hated to see a cent slip through his own fingers. This made "Gumshoe" mad and he fixed a price on his support that threw the Yankee into the cramps. They dickered and haggled up to the last minute before the bill was to come up for third reading; but Gumshoe wouldn't budge an inch or discount his price a dollar.

At the last ragged minute before roll-call, the Yankee, who was hid away in one of the committee rooms, turned to a young fellow from his own town, whom he had put on the pay-roll, and handed him a long envelope containing $5,000 with the remark: "Just hustle into the House and quietly hand this to Mr. Smith. It contains some papers he wants to use right away."

The young fellow was as green as a June pasture, so far as his knowledge of inside legislation was concerned, and besides that he didn't have any more than his share of brains anyway. He slipped into the House and asked the doorkeeper "where is Mr. Smith?"

"Right down the aisle there," answered the doorkeeper, pointing. "Standing with his hand on his own desk."

The young fellow slipped quietly down the aisle and laid the envelope on the desk indicated. Before the roll-call actually began "Gumshoe" slipped out of the door and began to look anxiously about. In a moment he found what he was looking for and he and the Yankee held about two minutes of mighty animated conversation. Then the young man who had been sent with the envelope came up. The Yankee grabbed him by the arm and asked, in an undertone: "You gave those papers to Smith, didn't you?"

"Yes," answered the young man in a scared voice.

Then Gum-shoe turned on the little fellow and said:

"You're a liar. You never gave it to me; you've salted it down in your own pocket, you little thief!"

"You?" was the astonished response. "Of course, I did not give it to you. I gave it to Mr. Smith, that grizzled headed little old man with the whiskers, on the right hand of the center aisle, third seat down."

In one second Gum-shoe made a rush for the meek little old farmer from the southern end of the State, who hadn't said a word during the whole session excepting to answer on roll call. About half of the members hadn't discovered that his name was Smith, and those who had distinguished between him from the other Smith by giving him his right surname, while they always spoke of the main Smith as "Gum-shoe." This was how the doorkeeper happened to send the innocent young man to Farmer Smith instead of "Gum-shoe," from the river district.

With a fierce grip on the old farmer's shoulder, "Gum-shoe" blurted out:

"Here, you old pious sneak-thief, just fork over that stuff right quick, or I'll smash every bone in your body!"

With a shaking hand the scared farmer made a dive into his inside pocket, pulled out the long envelope and handed it over. When "Gum-shoe" saw that it had been opened he gave a nasty laugh and said:

"If you ever peep on this I'll teach you that there's such a thing as honor among thieves."

On the roll call "Gum-shoe" voted for the bill and voted hard. As several of the members sitting near had heard snatches of the conversation, an inkling of the story leaked out and got into the newspapers. Of course, Farmer Smith put up the defense that he wasn't going to keep the money.

Some believed this and some didn't. Anyhow, both of the men were roasted to a crisp in the newspapers, and any one would naturally have concluded that neither of the Smiths would ever dare to run for pathmaster. But the records show that they were both back again in the House inside of four years, and "Gum-shoe," as you probably remember, was later sent to the Senate.

And so, Ned, you will see why I do not put quite as much confidence in the memory of the constancy of the ordinary constituency as your letter leads me to think you do. The average American king can forget benefactions and forget crimes about as nimbly as any other kind of a king. My advice is: Don't scrimp your next campaign fund because you have turned a good trick for your people. Get hold of some new issue and convince them that you're the only man that can get something for them that they want as much as they did the thing you have already landed.

Yours ever,

WILLIAM BRADLEY.

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# Colonel Monroe's Doctrine.

### The Lincolnville Philosopher Discusses the Decline in Stock Values and Weighs the Chances of a Panic.

BY FREDERICK UPMAN ADAMS.

"DO you think there is going to be a panic?" asked Judge Sawyer, when cigars had been lighted.

"If you mean a stock panic, I should say that we have already had one," responded Colonel Monroe, after an interval of silence. "If you mean the old-fashioned industrial panic, such as swept the country in 1873, and with lesser force in 1884 and 1893, I should reply in the negative."

"There seems to be a general fear that another one is due," said the judge. "What reason is there to believe that history will not repeat itself?"

"For the good and sufficient reason that history never has repeated and never can repeat itself," asserted Colonel Monroe. "When you pause to think that nature is so original and versatile that she never designs two seasons alike, and never has fashioned two human beings, trees or plant which are dissimilar, what reason have you for thinking that so complex and complicated a thing as a sequence of historical events can by any possibility repeat itself? 'History repeating itself' is one of those trite and indolent expressions which, when analyzed, are found to be meaningless. History is ever new, ever changing and ever mysterious. One can no more forecast with accuracy the events of a future predicated on the happenings of a past than can he outline next year's weather by studying the meterological records of a century. The best evidence in the world that there will be no industrial panic in the near future is found in the circumstance that hosts of alleged wise folks are predicting one. The more a panic is predicted, the less likely is is to occur."

"But what is the meaning of the terrific decline in stock and security values?" demanded Judge Sawyer. "Is it not true that marked slumps of this kind have always been followed by panic and depression?"

"Nothing of the kind is the fact," returned the colonel. "You have placed the cart before the horse. When Jenkins gets through raking down that fire I will deliver a lecture on panics."

"You can't tell me much about panics," said the postmaster, closing the door of the cyclinder stove and adjusting the damper. "I have been through four of them, and I don't want no more. So long as I hold this job, and you can bet that I'll be here for five years more, I'll draw my salary from Uncle Sam once a month. There's no panic going to do much damage to the United States government."

"You are like others of my acquaintance," reflected Colonel Monroe, with a glance at his friend, the judge, "who seem to think our government was expressly designed for two purposes, of framing laws and for running postoffices. I wish I could say as much for its lawmaking ability as I can for its executive genius in carrying the mails. If Flannagan, the brakeman, were working for the government instead of for the M. M. and O., he would not be worrying about his salary this coming winter. But, of course, the government does not know enough to run that Jim Crow railroad."

"You are delivering the wrong lecture," interrupted Judge Sawyer. "We know your views on the government ownership of railroads. Let us hear about panics."

"If the government owned the railroads and other inherent monopolies there would be no possibility for panics," said Colonel Monroe. "But we will not discuss that end of the problem. On the contrary, we will consider it from existing conditions. When the people know enough to understand the causes of panics they will find ways for avoiding them. There are three kinds of panics, stock panics, financial panics and industrial panics. These are of importance inversely in the order named. A stock panic may now occur at any time, and its effect be entirely confined to the gambling operations of Wall Street and its allied exchanges. There was a time when stocks could not rise or fall without seriously affecting the financial and industrial machinery of the entire country. That was when the face value of stocks fairly represented the properties on which they were issued. That was before dishonesty had become a science. Stocks rose and fell from natural causes. If earnings increased, stocks went up; if earnings decreased, stocks fell. The market as a whole was a fair barometer of the prosperity of the country and of its comparative commercial standing with the rest of the world.

"Such violent fluctuations of stocks as we have recently witnessed were unknown in the period before 1890. Even in times of panic the movements were slight compared with those which now happen, when all of the country is prosperous. The man who could so manipulate a stock as to cause a rise or fall of 10 or 15 points in a year was crowned king of speculation. Fifteen years ago the speculative world would have stood aghast at the spectacle of a score or more of stocks climbing from 20 to 100 points in a few months, only to plunge down again, without apparent reason. It would have been the signal for a general panic. But now we pay little attention to such an event. Why? Because every man of intelligence knows that these quotations record nothing but the efforts of more or less unscrupulous swindlers and gamblers to pluck those so stupid or reckless as to play against a crooked game. The collapse of the average Wall Street security has no more financial significance than has the crooked work of a jockey on whose horse the betting public has plunged. Every man capable of rejecting the overtures of a green goods man knows that most of these stocks have no more intrinsic value than the chips in a poker game.

"Under such condition a stock panic has about as much significance as the fright of the circus venders who suddenly make the discovery that the assembled farmers will not buy their pink lemonade or go against the shell game or roulette wheel. Such an episode does not affect the price of the farmer's wheat. The money expended in the purchase of gold bricks may temporarily depress the trade in the village store, but it is not a national calamity. If the gold brick operator had not been permitted to rob the farmer he might have been forced to turn burglar, and perhaps added murder to his venal rascality.

"In other words, the reason why the present Wall Street is not much more of a menace than less pretentious swindling and gambling institutions is found in the fact that not enough fools or knaves can be found to patronize it. The number seems large, but when you compare the army of sturdy, honest American citizens who never gamble in stocks with the deluded few who pile up the fortunes of the Wall Street clique, the latter sinks into pitiful insignificance contrasted with the noise they make.

"The men who own and run the Wall Street game can bring about a panic as easily as a crooked horseman can dope a runner, or a gambler manipulate a [illegible] We know that hundreds of millions of dollars have been lost recently by the 'public' as a result of the panic in stocks. Do you know of any one who has won any of this money. Nine hundred and ninety-nine out of every thousand men and women who gamble or invest in stocks have lost money in the recent fall in the value of these swindling 'securities.' Who has won this money? If I sell you a piece of worthless paper for $100 and you succeed in selling it to Jenkins for $50, and Jenkins finally makes the discovery that it is worth nothing, who is winner in the transaction?"

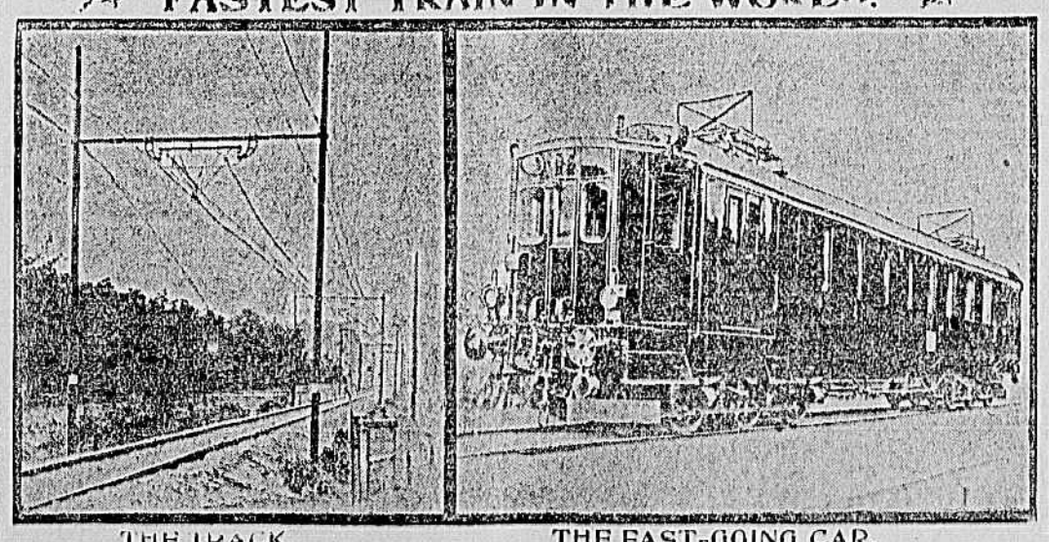
"You are—unless Jenkins and I can force you to restore us the money of which you have robbed us," answered Judge Sawyer.

"That you cannot do, if I am a financier," continued Colonel Monroe. "More than that, the decline in the price of your security does not vastly concern Flannagan or the farmers or merchants of Lincolnville. The point I am attempting to make is this: Instead of being a barometer of business conditions and a register of intrinsic values Wall Street records the relative success of chicanery and the concerted elation or depression of stupid cupidity. A Wall Street panic signifies the fright of dupes. Of itself it cannot have any decided effect on the prosperity or prospects of the nation. As I said before, there was a time when such a disturbance as we have had in Wall Street would have plunged the country into a panic. But there is a new West and a new South, whose interests are centered in securities other than those listed in New York. The manufacturers and farmers are no more concerned with the fluctuations of these gambling stocks than they are with those of South Africa. The manufacturer looks to his market and the farmer to his crops, but neither of them gives more than a careless glance at the quotations on the stock list. A crop disaster or a crop failure means much to Wall Street, but a Wall Street collapse means little or nothing to the farmer or manufacturer. Any one of a hundred causes can bring about a stock panic, but the disturbance begins and ends within a stone's throw of old Trinity Church.

"The realization of this fact, coupled with the startling revelations recently made concerning the actions of certain men high in financial circles, divests Wall Street of its last pretense to prestige or respectability. Happily this country is too great and powerful to be seriously shaken by swindlers and confidence men, even when they are fortified with millions and leagued with banks and other moneyed interests. One cannot help feeling sorry for those small investors who have been duped, but their undoing has no lasting effect on the prosperity of the country. Considered broadly, I should say that whatever of contempt all honest men must have for Wall Street and its methods, we may dismiss its panics as incidents, not worthy of serious moment."

Colonel Monroe's remarks concerning industrial and financial panics will be narrated in the next paper.—(Copyright, 1903, by Frederick Upham Adams.)

# FASTEST TRAIN IN THE WORLD.



THE TRACK. THE FAST-GOING CAR.

(Special Correspondence to The Times-Dispatch.)

BERLIN, Nov. 8.—The latest record of the electric trains which are being used in the speed tests of the Society for the Study of Electric Express Railways is 189 kilometres (118 miles) an hour. The test was made on the railway between Marienfeld and Zossen, near Berlin.

Not a single hitch marked the trials. The track is smooth and straight. It is a single track and passes through a beautiful woodland district.

A tremendous crowd witnessed the tests, experts from all over the continent being present. No Americans of note were there, however, though since the test has been made several cablegrams of length have reached the officials in charge, from Washington, asking for particulars regarding the technical matters concerning the tests. It is learned, though, that the enquiries do not come from governmental sources.

Such a tremendous speed as recorded is far above anything done by railway trains now in practical use. So far as the railway records are concerned, there is considerable controversy between this country and England as to which holds the championship. The Britishers contend that 90 miles an hour done on the Great Northern Railway between Grantham and Doncaster is the present record for a railway train. Their contention is that short bursts of speed which exceed this do not in any way constitute a legitimate record. The records for short distances run as follows:

In 1893 the New York Central made a record of 5 miles at 100 miles an hour, and a week later made another record of 127.6 miles an hour. The famous engine 999 of the Central Road was said to have run a mile at the rate of 112 miles an hour. This was never authenticated.

In 1898 a six-car train on the Philadelphia and Reading made 26 miles at 85.4 miles an hour. On the table of fastest long distance trains the Lake Shore and Michigan Southern holds the best known record, made on October 21, 1895, when 500.1 miles were run in 470 minutes, 20 seconds, or 65.07 miles per hour. On October 29, 1901, J. P. Morgan's special on the Michigan Central ran to Detroit from Niagara Falls, 227 miles, in 200 minutes.

The inventor of the Mono-Railway, which it is proposed to construct between Manchester and Liverpool, England, contends that when in operation his trains will be able to travel at a speed varying from 100 to 110 miles an hour.

# Refining Radium.

One day I found M. Curie in one of the rambling sheds of the Ecole de Physique bending over a small porcelain dish, where a colorless liquid was simmering, perhaps half a teacupful, seven thousand francs' worth of radium in a fairly weak solution, and he watched it with concern, always fearful of some accident.

M. Curie proceeded to explain what he was doing with the little dish; he was refining some radium dissolved in it; that is, freeing it from contaminating barium by repeated crystallization, this being the last and most delicate part of the process of obtaining the pure metal.

"We have our radium works outside of Paris," he said, "where the crude ore goes through its early stages of separation and where the radium is brought to an intensity of 2,000, as we express it. After that the process requires such care and involves so much risk of waste that we keep the precious stuff in our own hands and treat it ourselves, my wife and I, as I am doing now, to bring it to the higher intensities, 50,000, 200,000, 500,000, and finally 1,500,000. What you see here is about 100,000. It will take many more crystallizations to bring it to the maximum."

"That is to the state of pure radium?"

"To the state of pure chloride of radium. You know the metal exists only as a chloride or bromide. It has never yet been isolated, although it easily might be."

"Why has it never been isolated?"

"Because it would not be stable, it would immediately be oxidized by the air and destroyed as happens with sodium, whereas it remains permanent as a bromide or chloride and suffers no change."—Cleveland Moffett, in November McClure's.