

# UNCLE SAM LIGHTS JOHN BULL'S PIPE

# FIGHT BETWEEN MATCH COMPANIES WHICH AMERICAN MANUFACTURERS WON

LIVERPOOL, July 2.—In the manufacturing town of Seaford, about four miles from Liverpool, not far from the banks of the Mersey, up which steam the greatest of our Atlantic liners, stands one of the great fortifications of the American invasion. It is a gigantic building of gray brick, covering acres. It has four stories and is walled with windows. At one end is a smokestack so tall that it can be seen from the sea and over the country for miles around. High above the roof of the building are two signs, one marked, "Bryant & May," and the other, "The Diamond Match Company." The whole is under one firm, and it comprises one of the largest factories of England. The building is filled with American machinery, it is operated chiefly by American capital and it has a monopoly of the match business of Great Britain and Ireland. John Bull is the greatest smoker on earth, but it is Uncle Sam who furnishes the tobacco and makes the matches to light his pipe.

I have already written of the struggle between Bryant & May and the American match trust. For years Bryant & May had the monopoly of match-making in Great Britain. No one attempted to compete with them, and they had little fear of English opposition. Then the American match trust came in. The Diamond Match Company, headed by Ohio Columbus Barber, cast its covetous eyes on the profits of the British monopoly, and sent its men here to investigate the trade. Their report was that the chances were excellent, the matches in use very poor and the possibilities of the market enormous. As a result the Diamond Match Company determined upon the phosphoric invasion of England. They built this factory and filled it with the finest machinery.

### How Phosphorus Feeds on Human Java.

Bryant & May had been working after old methods. The most of their matches were strong in phosphorus, and they had to be dipped in such a way that the phosphorus came in contact with the skins of the workmen. Now, phosphorus is ordinarily very deleterious to those working in it. It is especially so to the teeth. The workman or workwoman—for women are chiefly employed in matchmaking—who has a decayed tooth, soon finds that she has a decayed jaw, and, if she continues to work, no jaw at all. The phosphorus gets into her system. It eats its way through the tooth to the bone, and the result is the terrible disease known as necrosis. Bryant & May had 1000 girls working for them, and of these hundreds had decayed teeth. All such were affected by the phosphorus, but they worked on in despair, and dropped out when the disease became so bad that they could not work. The heads of the establishment tried to keep these conditions a secret, but they at last came to the knowledge of the public. Much indignation was expressed. Parliamentary investigation ordered, and the firm was notified that no more such matches could be made.

### How the Americans Managed It.

It was about this time that the Diamond Match Company began its business. It made its product by such machinery that the hands of the workmen did not come in contact with the wet phosphorus, and its goods were put on the market with a petition with Bryant & May's. Before beginning work the Diamond Match Company had a careful examination made of the teeth of its employees. It filled these with a special dental preparation, a regular dentist to do nothing else but watch the teeth of the people working in the factory.

This is the case today. There are about 1000 girls employed, and these girls have perhaps the purest and sweetest mouths of any 1000 girls you can find in any factory in the world. They are dressed into corps and each wears in the head of a matron, whose business it is to watch the girls, and to report at once if there is anything the matter with their teeth. The girl that complains of a tooth ache is sent at once to the dentist, and the cavity filled or the tooth taken out. Every so often the dentist makes a personal examination of each mouth, and so far there has been no necrosis whatever.

### How American Machinery Conquered.

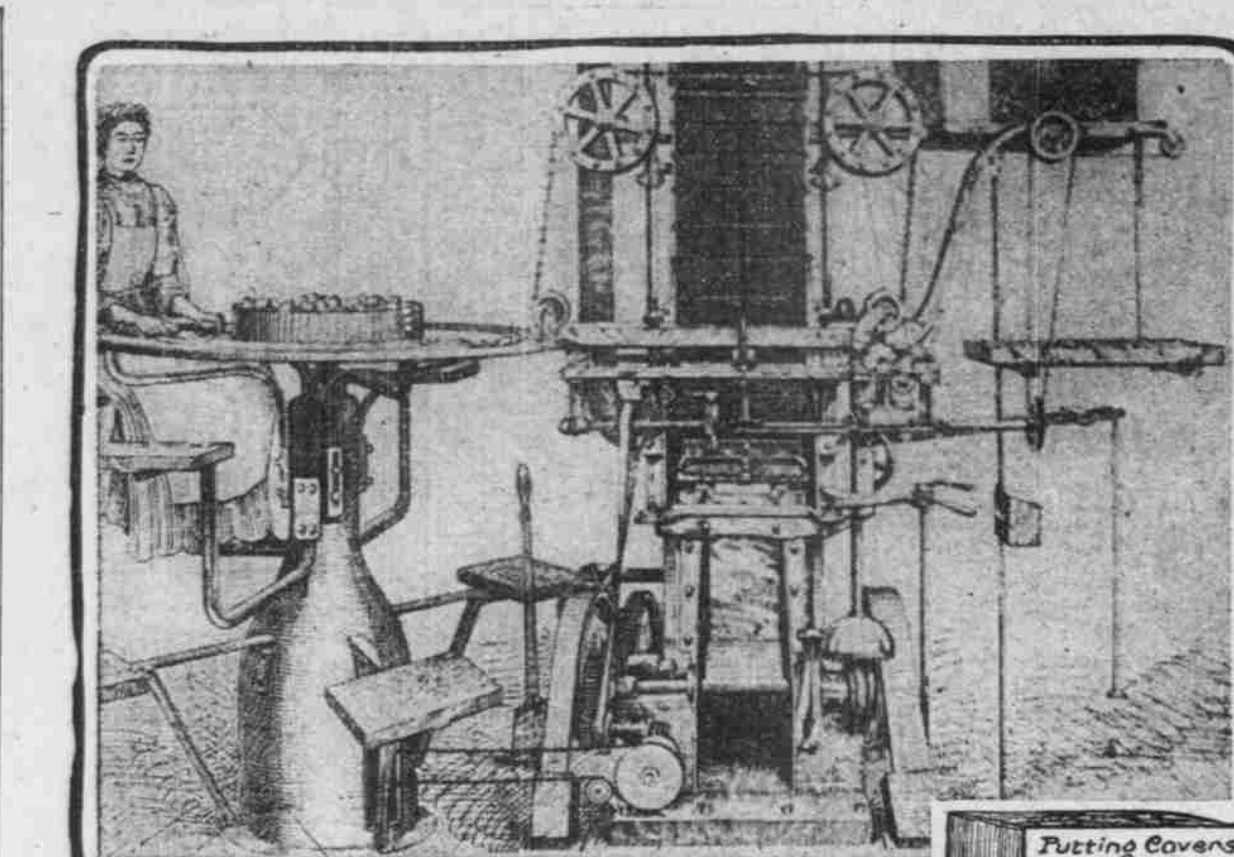
While the Bryant & May people were in trouble about their diseased employees, the Diamond Match Company began to flood Great Britain with its products. Its matches were made by the finest of machinery. For years Mr. Barber had been studying and experimenting with the use of such machinery as would make matches as much as \$10,000 a year for match patents and as high as \$50,000 in experiments and the result was that he went into the market equipped with the latest inventions. He had made a fortune of \$3,000,000 or \$10,000,000 by manufacturing matches for the United States, his various works at Barberton, near Akron, employing about 5000 people. He is also thorough business man in every sense of the word and he brought both experience and brains to aid his patents in working the trade.

### The English Absorbed.

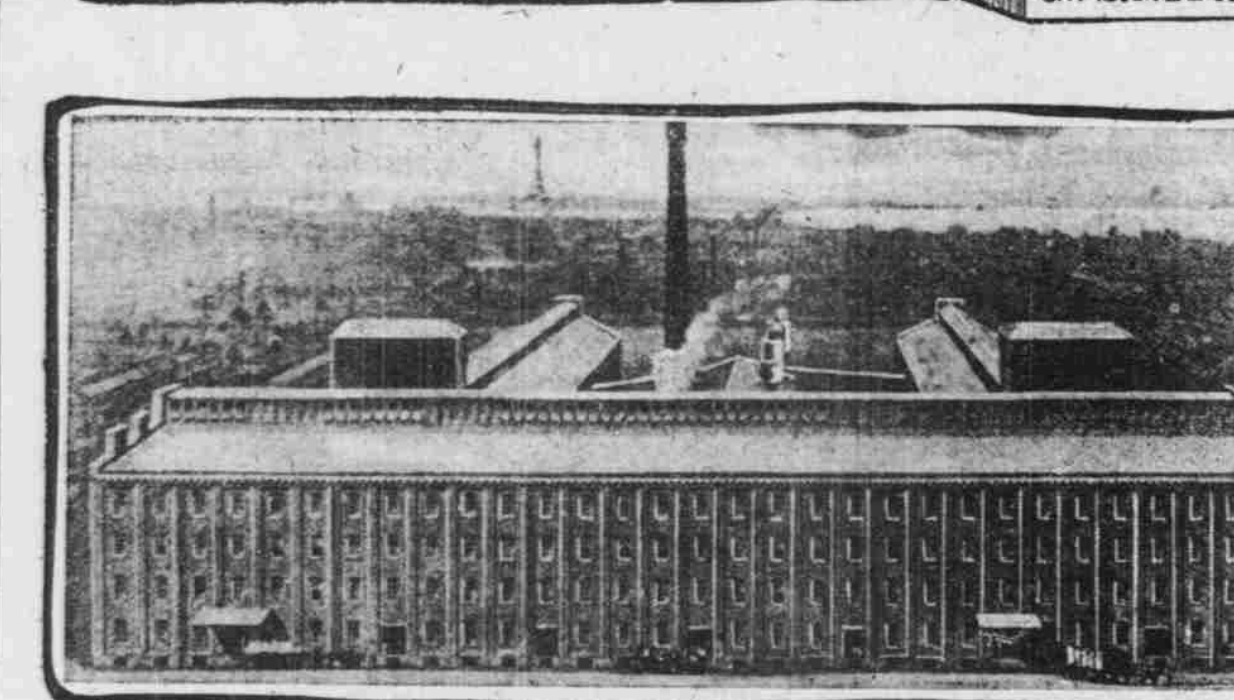
The Bryant & May people soon found that it was impossible to compete with the Americans. They sent their agents all over the world for patents that they might get new matchmaking machinery, but there were none to be had. They tried tried making safety matches, but they did not understand the business, and the matches were not a success. The heads would come off or would fall to light, and they proved generally worthless. The English monopoly had been paying dividends of 20 per cent, but under this competition they saw their business rapidly dwindling. The dividend fell to 14 per cent, and it was seen that in time there would be no dividends whatever. Then the heads of the American company stepped in and held a conference with the managers of Bryant & May. The Americans showed them that they knew more about the English match business than the English themselves, and proved to them that they could easily crowd them out of the market. They said they would do this, but that it would be cheaper to buy them out or absorb them than to fight them, and they offered them the alternative. The Bryant & May people gave in, and the English monopoly thus swallowed up by the American firm. The business is still carried on under the two names of "The Bryant & May" and "The Diamond Match Company." It is now nominally English, but it is really American.

### How the Yankees Make Matches.

I went out to Seaford this morning to learn how the Yankees make matches for the English markets. There is a street-car, run by the city, which for a fare of 4 cents takes you the four miles from Liverpool to the factory. I had a seat on the car, and could see something of the business of Liverpool as I rode. We passed through miles of warehouses, by teams of great Shire horses, hauling loads of from five to 10 tons, through long streets of two-story buildings, the homes of the workmen, by residences of the better classes, and on out into the country. There were factories here and there along the way and a thick smoke seemed to hang over the city as we rode out of it. I alighted at the wrong end of the factory, and walked almost a mile in going about the walls which surround the grounds before I reached the office. I presented my-



Putting Covers on Match Boxes.



Factory That Lights John Bull's Pipe.

self as an American newspaper correspondent, and upon my assuring the manager that I was not in the match business I was shown over the works.

**American Machinery.**

Nearly every bit of the machinery in the factory is American. The engines were made by the Buckeye Engine Company, of Salem, O., and the dynamos by the Electrical Manufacturing Company, of Akron. The boilers came from Chicago, and the match machines were put up by men from Barberton.

But I can give you a better idea of the factory by describing my trip over it. I was taken first to the top, where we found hundreds of girls seated high above the ground, about revolving tables, putting the covers on match boxes filled by machinery. The girls looked healthy and well dressed, and in these respects they are superior to the average factory girls

of this country. They are far better treated, and the effect is shown in their general appearance. The shops are well lighted and ventilated. Dining-rooms are provided for the employees, and the American capitalists give them three meals a day gratis. They get a cup of hot tea and a biscuit in the morning, a bowl of hot soup at noon, and at 4 P. M. they are again served with tea and biscuit. There are large kitchens in the basement, and the provisions supplied by the managers are placed out with the food the employees bring with them from home or they can buy their meals at cost price. A good dinner is served for 6 cents, and single dishes for 1 or 2 cents. The result is that the factory is a most desirable place of employment. There is more than enough good labor always on hand, and the best workmen are secured.

The effect of the treatment has been a surprise to other employers of labor about

Liverpool, and several of the large English factories are adopting similar methods.

**About Matches Not Made in Heaven.**

But come with me and take a look at the factory. I have called it a Yankee institution, and so it is in its machinery and in the money that runs it. The most of the employees are English, and the matches are sold all over England under the advertisement, "Made by British labor." It is at the top of the great building that the most of the matches are made. The room covers more than an acre, and there are 18 machines in it which take the blocks of cork pine from the United States or Canada and cut them into matches. They dip the end of each match in paraffin, coat it with the sulphur and phosphorus, which makes the fire, and then dry it. The machine is automatic, and it packs the matches into boxes and



Yankees Give Free Dinners To Their English Workmen?



Two Story Street Cars in Liverpool.

delivers them on the round revolving tables, where girls sit and put the covers on. In the whole process the girls' hands are not in contact with the matches until they are dry, and they are, therefore, in no danger from the contact.

It is wonderful how fast the machines go, and what an enormous amount of work they do. Each machine cuts 48 matches at a stroke, and the larger ones make 200 strokes a minute. As the matches are cut they are automatically struck in a flexible cast-iron band, from which they project like bristles. This band travels over a wheel after wheel, dipping the matches and carrying them by ventilating machines, until they are dry and ready to pack. The machines are absolutely reliable; they will not handle broken matches, and the dust and the breakages drop out and are carried down into the furnaces under the boilers. It takes about 12 hands to work one of these machines,

and each machine will turn out more than 4,000,000 matches in 10 hours.

**Making Wax Tapers.**

Leaving this department, I went into the rooms where wax tapers and paper matches are manufactured. The paper matches are made of cardboard, being put into a machine which prints an advertisement on every match and cuts it to the proper length. Other machines dip the matches and dry them. They also put on the safety heads and arrange them in boxes.

Wax matches have a basis of fine cotton. The start is with the thread, which is twisted and drawn through a bath of heated paraffin wax, and then through a die containing a number of holes. When the paraffin coat has been put on the threads look like white wires of about the thickness of a match. They are wound on big drums, and the rest of the process

is much like the making of the wooden matches above described.

In other rooms the boxes are made by boxmaking machinery, being turned out by the millions a day. The boxes are of all shapes and sizes. The greatest number are of pasteboard and paper, many of brass and tin, and not a few of wood. Some of the strawboard box machines will turn out 70 boxes a minute.

The total output of the factory runs into hundreds of millions of matches a day, and it is enough to keep these 4,000,000 men in lights and to furnish an enormous product for export to the continent, the colonies and other parts of the world. The company is, I am told, paying good dividends, and its business is steadily increasing.

### Other American Plants.

I find that the Americans are doing a great deal in many lines in Liverpool. They handle much of the cotton business, they have established a steam laundry which is making money, and they have recently got a contract to equip electrically the Mersey Railway, which runs through the tunnel under the river from Liverpool to Birkenhead. This road is now operated by steam, and it gives about as disagreeable a ride as you can find anywhere. The tunnel is badly lighted and poorly ventilated, the cars are of the English pattern, and are filled with smoke during the journey. The British Westinghouse company contracted to make the change, and the machinery to be used will probably come from the United States, as the new Westinghouse shops have but lately begun working.

There is also an American cold-storage plant here, and the Diamond Rubber Company has erected factories to supply rubber to Great Britain. Americans are also interested in the mono-rail road from Liverpool to Manchester. The distance is about 35 miles, and the trains will be expected to cover it in 20 minutes. If they do, the traffic will be enormous. Manchester, with its sister City of Salford, has 755,000 population, and Liverpool 585,000. At present there are three steam railroads, which cover the distance in 45 minutes. The new road will run at intervals of 10 minutes, and its speed will be 110 miles an hour. The system used is known as the Behr system, electricity being the motive power. It is really a five-rail line, two rails being carried on each side of a frame and one on the top. The right to build the railway has already been secured from Parliament, and it is believed that the road can be successfully operated. I understand that Cleveland parties are interested in it. If it is a success it will lead to the construction of mono-rail roads not only all over the United Kingdom, but all over the world.

### Troubles of American Builders.

I have already written of some of the troubles of our railway-builders in England. The men who are putting up the different factories have troubles as well. One was complaining to me yesterday about the difficulties he has had in getting good work out of English laborers. Said he:

"I don't like the hours nor the breaks in the working day that we have here. The English hand begins labor without his breakfast. He brings his meals with him, and it is the usual thing for him to work about two hours before he knocks off for breakfast. My men first came at 7 and dined over their work until 8.30, when they stopped to eat. After breakfast it took about half an hour to get into shape to do their best work, and the result was that the morning was practically spoiled. I called them together one evening a few days ago and told them that they must get their breakfast before they left home. I said they had better come to the factory at 6.30, and have their breakfast inside there. There were some objections, but upon my telling them that they must do this or stop work, they stayed. 'Another trouble is the holidays,' this man continued. 'You only get half a day on Saturday, and as many of the men drink, you often find your force short on Monday. After Easter and Whit Sunday but who don't work until 8.30, when they play, and there are other holidays. I have also had considerable trouble to get full work out of my men. The masons will not lay more than 500 bricks a day without you push them, and it is only by offering extra wages that I have succeeded in getting as much as 800 or 1000 bricks per diem.'

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## A WEDDING BY CABLE

HOW ARCHIBALD GIDDINGS FELL IN LOVE WITH A LADY'S MAID—BY HELEN T. WOOD.

MR. ARCHIBALD GIDDINGS was an Englishman, but not of the pleromatic type, or this story would never have been written.

At the death of his parents he had been taken by a male attendant to his only living relative, an uncle, in Melbourne. There he grew to manhood under the watchful eyes of his instructors and his bachelor uncle.

At the age of 20 the fair ex had played no part in his life. His uncle spared neither time nor money to make Archibald Giddings' education complete. He had the best of instructors, and only the best, in art, in literature, in the sciences, was to his attention. In horsemanship, hunting and athletics he was trained by the most skillful tutors. But women did not pass within the domain of his uncle. He grew up with a strange feeling of aversion for the opposite sex. Having a great admiration for his uncle, and feeling sure that his uncle's life had been saddened by a woman, he resolved to remain a bachelor to the end of his days.

Then things took a widely different turn in the life of Archibald Giddings. His uncle died suddenly, leaving a will which made the nephew sole heir to his immense fortune on one condition only—that he, Archibald Giddings, confirmed bachelor, marry within the next six months. It was sudden, startling and decidedly unthought of.

At least, there was six months to look about in, certainly not for a wife, but for what might be done at the end of the six months when the income and all the luxuries of life which he had so long enjoyed should cease with him. A few weeks were given to the settlement of his uncle's affairs, and Archibald Giddings prepared to bid good-bye to Melbourne.

In packing his trunk he ran across a copy of a New York newspaper which had been among the last mail received by his uncle. The bold headlines on the first page caught his attention, and he read an item of most peculiar interest.

A wonderful coincidence. A young woman in New York City had been left a bequest that was precisely similar. As in his case, it amounted to millions. As in his case also, the young woman was a confirmed disciple of single blessedness.

The paper was four months old. Archibald Giddings bought a plan to plan was to act. The young woman in New York was immediately cabled an offer of marriage, said marriage to be performed by cable in the presence of a sufficient number of witnesses at the ends of the line. The entire situation was clearly explained in the message, and Archibald Giddings had only to wait for the return cablegram.

The young woman in New York replied that she was still unmarried, and that she would accept Mr. Giddings' proposal on the condition that the marriage should be held sacred by both parties; that the understanding should be

that they would live their lives as they were now doing, united only by lawful ties.

Archibald Giddings was delighted. He secured a verbose legal opinion from a most learned Judge that such a wedding would be perfectly lawful, and preparations were immediately begun for a wedding by cable.

Private wires were laid to the house of the bride in New York and to the house of the groom in Melbourne from the office of the cable company. A corresponding date and hour was set for the wedding to take place in both cities. An eminent divine of Melbourne and an equally eminent divine of New York were engaged to officiate at this novel ceremony. The marriage was recorded in both cities.

This accomplished, Archibald Giddings came into possession of his vast fortune and assumed the air and bearing of a benedict. His marriage vows were sacred, and the understanding between himself and wife was perfect—neither should in any way interfere with the other; their lives should go on as before. Mr. Giddings decided to travel extensively, but he proposed to steer clear of New York.

Three years later he left Boston for Liverpool. The social duties on a fast ocean liner would have bored him, so to make sure of privacy and an opportunity to enjoy himself and his books he took passage on a slow tramp. The captain and crew were of the highest type—old sea dog, an excellent character and a man of few words. "I sometimes take a few passengers," he told Mr. Giddings, "but they must pay fare and register on coming aboard."

Having come on board at night at the moment of sailing, Mr. Giddings was unable to register until morning. When he glanced at the book he wished that it was possible to leave the ship, but she had already sunk Highland Light in the horizon. There before his eyes, in a fine, bold, feminine hand, were registered "Mrs. Archibald Giddings, child and maid." Archibald Giddings' presence of mind did not forsake him; he signed the register "Amos Gridley" and hurriedly left the cabin.

He must make the best of it, and, at all events, his identity need not be discovered. It was really quite a piece of good fortune; he could meet and study his wife without being known. The child puzzled him. The maid called him "Archibald"; he was a fine little fellow, about 3 years old, presumably Mrs. Giddings had adopted him. This appealed to Mr. Giddings as a piece of good judgment.

At breakfast "Amos Gridley" and Mrs. Giddings were introduced, and also Miss Eunice and Master Archibald. It suddenly occurred to Archibald Giddings (alias Gridley) that he had forgotten his wife's given name. Mrs. Giddings was well dressed and quiet, but neither particularly beautiful nor what could be called magnetic. In fact, she was quite plain; the child called her "mamma."

"Now, if it had been the maid! Eunice, his name," thought Archibald Giddings; but he promptly drove the thought by joining the captain in a brandy and soda. The captain took his straight.

Little Archie promptly attached himself

to the person of "Amos Gridley, Esq.," and the twain soon became bosom friends. This necessitated frequent talks, talks and games with the maid, who was exceedingly bright, accomplished and attractive—even beautiful. Mrs. Giddings was a very poor sailor and seldom left her cabin. Miss Eunice was an excellent mariner in both fair and foul weather. Father Neptune was deaconing the cards, and the boys were denoting the cards, and the boys were denoting the cards, and the boys were denoting the cards.

When Archibald Giddings sought his berth he was haunted by dreams of Eunice. He dropped the "Miss" in his dreams. Archibald Giddings' mind had found something new to work upon, and was making the best of it. His blood fairly boiled through unaccustomed and delightfully new channels. He had been extremely pleasant to Archibald Giddings had he not been tormented by his keen sense of honor. It was not Mrs. Giddings, his lawful wife, that inspired this tumult within him.

All voyages have an end, and on their last night about Archibald Giddings found himself promanaging the deck alone with Miss Eunice. The ship pitched heavily, and Miss Eunice clung closely to his arm for support as they paced the deck. Was it possible that she cared for him?

He never knew how to tell her all about it or what he said or what he did. Her answer burned itself indelibly into his bewildered brain and a new world seemed to open to him.

"I have known it all for three days, dear old fellow," said Eunice, "but you books. I am not the maid, but your legal wife, Eunice. The real maid is my cousin, the 'Mrs. Giddings,' you know. Yes, it is her child."

What followed is not a matter for the historian to record. Suffice it to say that the following week the Melbourne-bound Australian packet bore the following entry on its passenger list:

"Ar. and Mrs. Archibald Giddings, maid and child."

Life's voyage had made its real beginning.

**Violins Made of Porcelain.**

Violins and mandolins of porcelain are the latest things "made in Germany." A well-known manufacturer of the Messala okarinar and porcelain organs has invented a process for the manufacture of violins and mandolins from clay. Some violins have already been completed, and the inventor has applied for letters patent in different countries.

Under this process the violins are cast, and every violin is guaranteed a success and to be excellent for producing music. The latter quality constitutes precisely the chief value of this invention. The porcelain body, it is claimed, is better able to produce sound than a wooden one, since it is not affected by the humidity of the air, making the notes soft and full. The mandolin, much played in Southern countries, is also made of porcelain, and the musical sound of this instrument is likewise stated to be improved. In shape the porcelain violin is an exact imitation of the wooden instrument, but, as the porcelain violin is very suitable for decoration, it is very likely that costly instruments of luxury will be asked for, as is the case with the okarinas.

It is asserted that the porcelain violins possess the further advantage over the wooden ones that they are totally insensible to the influence of the weather. That the porcelain violins are liable to breakage and that they are heavy appears to have been left unconsidered. They are made in the earthenware factory at Sorne-

## SENATOR HANNA'S CORNBEEF HASH

SIMPLE DISH, SERVED FOR BREAKFAST, THAT EVERY GUEST ENJOYS

(Brooklyn Eagle.)

WASHINGTON, June 28.—In the old days of Sam Ward and Larry Jerome, statesmen conferred and big legislative deals were arranged over champagne and terrapin dinners at Chamberlain's; today, statesmen are "persuaded" after a breakfast of corned beef hash and griddle cakes at Senator Mark Hanna's old-fashioned home, facing Lafayette Square; and it must be said that the homely fare served by the latter to his guests is quite as efficacious as the more epicurean dishes that were formerly so popular.

Joseph H. Manley, of Maine, who has known intimately nearly all of the famous politicians of the last quarter of a century, has attended the breakfasts at Senator Hanna's home; so has J. Pierpont Morgan, who came all the way over from New York last winter for the purpose of testing the Ohio leader's hash.

"I tell you," said Manley, smacking his lips, "those Sunday morning breakfasts at Hanna's are great. It makes my mouth water to think of them. The corned beef hash is the best I ever ate and the fried Potomac white perch and cornmeal griddle cakes with maple syrup can't be beat."

When asked whether the breakfast took the place of a dinner and whether for business purposes the former was as good as the latter, Mr. Manley replied:

"Yes, I think more work can be accomplished during and after a good breakfast than after a dinner, for in the morning the head is clearer and men are more apt to listen to a good sound argument; it is plain hash. Hush just as mother made it, and there you are. For the benefit of those who never ate mother's hash I will give you the recipe. In the first place, Senator Hanna's cook corns her own beef. She selects good beef and makes her brine of Rockbridge alum salt. Instead of the salt-peter generally used by butchers who wish quick action rather than effectiveness. In preparing the hash she chops equal parts of corned beef and boiled potatoes, puts them in a pan with a little boiling water and butter, seasoning of course, with pepper and salt, and when the mixture is very hot it is served. No onions are used and no other seasoning

than pepper and salt, and the hash is not browned as has been erroneously stated. Just the simplest, plainest, most wholesome hash that ever was, and it appeals by reason of its simplicity most of all to the epicure, to the man with the jaded appetite, just as a garden rose will ex-hale more sweetness and awaken more real sentiment than the cultivated article with less fragrance that has been raised under glass."

The charm of Senator Hanna's home is its simplicity and coziness; the rooms are spacious and comfortable; white flowers everywhere. It is characteristic of the man.

The dinners given by him since he has been in Washington illustrate well the change that has taken place in dinner giving here in late years. He serves good things to eat and does not use his board to enable a chef to exploit his mechanical handwork in the ornamentation of dishes at the sacrifice, nearly always, of health and, frequently, of taste. His terrapin, when he serves it as a course, is plainly cooked, but it is the finest that can be bought and needs no art to make it appeal to one. It is simply terrapin au naturel.

Hanna is getting to occupy almost as conspicuous a place in the gastronomic world as did Sam Ward, and yet there never were two men more widely different. Ward was all for trifles, pate-de-frole gras, and the highest of seasoning, with a different wine for each course, while Hanna affects the simplest cooking in the world, with never more than three wines; generally two.

### The Kind Policeman.

St. Nicholas.

"The nicest man I ever saw," said little Nan to me, "is the one who stands outside our school. We're let out at three."

"He's dressed just as the soldiers are; he wears gold buttons, too. And he stands up so proud and straight. The way the soldiers do."

"He always says, 'Come little kids, I'll take you 'cross the street, and I guess 'cause I'm the little girl. He always holds my hand."

"And all the cars and horse stop—He's so big they don't dare to say 'let up,' and drive 'em on, 'cause he's standing there."

"He makes believe to chase the boys, and shakes his fist, and then he laughs and laughs, and they all come 'a-scampering back again."

"Sometimes he puts me on the head."

"And says, 'Ho! little girl, you going to wait till Christmas comes to cut me off that curl?'"

"And one time when it rained, the street was muddy, and I cried; He picked me up and carried me Right to the other side."

"The nicest man I ever saw," said little Nan to me, "is the one who stands outside our school. When we're let out at three."