A COQUETTE.

From Temple Bar.

She rambled through the meadows wide,
So richly gemmed with dew;
Her hair was bright as golden light,
Her eyes were azure blue.
And shyly, there, the farmer lad
Betrayed his love and woe;
She passed him by
With head held high,
And coldly answered "No!"

She wandered to the woodland pool,
By wild flowers all begirt,
She saw her beauty in its depth,
And smiled—the pretty flirt!
And there the curate told his love,
Though hope was almost dead;
But though she sighed
She naught replied,
She only shook her head.

She lingered by the broad park gate,
The old lord lingered too;
He sought the maiden for his bride,
And knew too, how to woo.
And though he feigned love's sad despair,
Her answer he could guess;
But could not spy
Her triumph high,
She smiled, and whispered "Yes."

THE TWO PIPERS OF DUNTROON.

Stories of Scotch Devotion.

Good Words.

Lonely on its rock, washed by the sea waves, which on a stormy day dash up against the windows of the upper story, stands the Castle of Duntroon.

The traveler from Oban to Crinan has a good view of it as the steamer turns the point and crosses into Crinan Bay; and is a view which, if he has any love for the wild and beautiful—and sympathy with the strange Highland pass, where men fought and raved all their lives, never resting till they died—he will not easily turn from or forget. Perhaps he may feel interested enough to inquire of one of the sailors who built it; who chose to perch his nest out there on the headland and defy the sea. And the man will answer probably that it was "Just one of the Campbells," for from here it is no "far cry to Loch Awe," the heart of the old Campbell country, if the Campbell country could ever have had a heart. A grasping, treacherous set, we are told they were, those Campbells who sold their King to his enemies, massacred the MacDonalds at Glencoe, got possession unworthily of the Lordship of Lorne, and quartered the galley with their own gyrons.

We may talk about them freely now, for their own land knows them no more; through the length and bredth of it, where once no other name was heard, scarcely one of them bears rule to-day; and remembering that it is pleasant also to remember some of the noble deeds they did while they were yet strong. How Sir Neil companied with the Bruce, and shared his wanderings and privations; how Archibald of the Sour Countenance, the grim old Puritan, ended his life on the scaffold for the cause of Scottish Protestantism, and his son followed him by the same rough road; and how in later days John of Argyll and Greenwich gave ear to the prayer of Jeanie Deans.

For many a century time has been working away at those gray old walls of Duntroon, and sunshine and shade melt softly into each other as we look up at them this morning, resting, after a long row, upon our oars in the bay.

They were rough enough, doubtless, 200 years ago, when Colonel MacDonald, the fierce left-handed warrior, came over from Ireland to claim his inheritance in Kintyre, taken from his father on account of rebellion, and gifted to the Campbells by James I. Determined to be revenged, he passed on through Argyleshire, sparing nothing belonging to the hated name. After burning the Earl of Argyll's Castle of Sween, in Knapdale Coll, he sailed down Loch Sween round the point of Keils, and up into Loch Crinan, intending to do the same at Duntroon; but being uncertain as to the strength of its garrison, he first dispatched his piper across the mountains to Crina with orders to gain admission into Duntroon Castle and bring him information regarding it. When the piper arrived he was hopitably received and lodged as a stranger within the castle; yet, treachery being for some reason suspected, he was not allowed to leave again in the morning, but obtained as a prisoner in one of the turrets. Thence, after long waiting, he saw his master's ship entering the loch. What chance for him now? The poor piper! The suspicions of Duntroon are confirmed beyond a doubt, and his fate is not difficult to foresee; but he does not think of himself. The Campbells are on the alert. He must save his master. And over the waters of the bay sound out the notes of a warning, yet not to be mistaken in its meaning. Tradition has joined to the air these words, and with the spirit of it they accord well:

"Coll, my love, keep from the tower, keep from the tower!
Coll, my darling, keep from the sound, keep, from the sound!
I am in ward; I am in ward!"

MacDonald heard; and veering northward, landed his troops at the head of the loch and led them through the valley of Kilmartin, burning, pillaging and cattle-lifting up to the shores of Loch Awe. Some kind of superstitious veneration for "religion" appears to have been in the man, though his humanity did not allow him to risk loss in endeavoring to rescue his poor clansman, for we find him immediately afterward sparing Campbell Auchinellau's corn and cattle because he was in holy orders.

In the year 1644 the Covenanters of Scotland, disgusted with Charles' duplicity, began their preparations for assisting the disaffected party in England. The commandership in chief of their army they offered to Montrose, and made him acquainted with all the purposes of their "Holy Union." Montrose set out for the north, and reached Durham in the beginning of March, 1644. There he found the Marquis of Newcastle, who rendered him all the assistance in his power; and so with an army of about 2,000 men he entered Scotland on April 13.

After various conflicts during the summer, quitting Aberdeen, Montrose turned back to Badenoch, where he was joined by MacDonald, but hearing that Argyll was at Dunfield trying to detach from his faithful Atholimen, he made one of his rapid movements forward—twenty miles through the deep November snow, which covered them in the mountain passes up to the knee—and was once again in Atholl, to the astonishment of his friends; while Argyll fled at his quick approach to the covenanting garrison at Perth.

It was now the middle of December; there was no fighting to be done, and Montrose's little army must find Winter quarters. Where? The low country was strongly garrisoned, the north was a wilderness, the east had proved itself hostile. He determined to step westward and carry fire and sword through Argyllshire. By the middle of December, marching as his men were well accustomed to march now he was within two miles of Inverary Castle. The lord of it, who had traveled thither straight from Perth in order to beat up recruits for the Spring campaign, thought the devil himself must be in such transports, and from the devil he again fled, this time by water, across Loch Fyne.

Montrose, overjoyed at the success of his witchery, divided his troops into three bodies, one commanded by MacDonald of Clan Ronald, another by Sir Alexander MacDonald, and the third by himself, and with them swept the whole country like a fearful animated pestilence; driving away the cattle, burning the villages and crops, slaying in cold blood every yonng man capable of bearing arms. Is it wonderful that the "Raid of the Atholiman" is still remembered with horror throughout the country they desolated, and that the name of Alexander MacDonald, and even that of James Graham, is execrated in many a Gaelic curse? The inhabitants of almost every western parish have some story to tell regarding this invasion. In Craignish they will show you the hill from which they fired on the castle and were beaten back with heavy loss; in Melfort, the site of the barn where men, women and children fleeing for refuge were burned to death; but nowhere has the devotion been forgotten of the brave boy, our second piper of Duntroon.

With the surrounding country full of retainers ready to give the alarm, it would have been folly to approach Duntroon from the land side, so Alexander MacDonald, following his father's example, determined to approach it by sea; though at this time an assault from either side might probably have been successful, for it happened that only Duntroon himself and a few friends were living in the castle—garrison there was none—and so unsuspecting of any kind of evil were they that while the enemy's ships were entering the bay a dance was going on in the hall overlooking. Darkness fell, ship after ship sailed up stealthily and anchored below the rock, and in the room above it still the dance went on. Were ever dancing and death nearer one another than they were that night?

After the failure at Craignish it is the more important that this should succeed. The order is given to land quietly and secure the gate; the men are beginning to obey, when suddenly the stillness is broken by the sound of a pibroch played wild and shrill from on board one of the ships, and as the first notes of it died away in the darkness, the lights in the castle windows were extinguished. The secret of the Atholimen is betrayed, but by whom? Allister, mad with passion, shouts for the traitor to be seized and brought before him. That is not difficult, since the pipes are still playing; but amazement almost overpowers his anger when he recognizes the player, a lad picked up by chance in the north of Ireland and pressed into service because of his music.

"Why have you chosen to betray your leader?" he asks.

"I have chosen to rescue my leader," replies the boy.

"Did I not hire you to encourage my followers in battle; not to give warning to the enemy?"

"Have I not encouraged your followers? But I dare not betray my chief."

"Am I not your chief by wage and contract?"

"Duntroon is my chief by a higher allegiance. I am his clansman, born beyond the hills yonder at Slochivullin."

Time permits no further parley. The garrison may be about to fire on them. "Cut off his traitorous fingers and hang him to the masthead!" is the savage order.

Ah, pity, Allister! have you forgotten your father's piper?

And the touching tradition closes by telling us how, when nothing but the bleeding stumps of his fingers were left him, the faithful clansman still played on, the music growing fainter and fainter as the chapter filled with blood, ending only when his pipes were taken from him, and with them his life.

The Atholimen pressed on to find the castle gates unbarred, and no one waiting to oppose their passage. In the dark hall, where half an hour before the dancing went on merrily, an old woman, too old to care for life, sits by herself, who tells them that she, thanks to the boy's pibroch, is now the garrison of Duntroon.

Uhese are the handed-down words of his last greeting to his chief:

"All hail to thee! all health to thee! all hail to thee, Duntroon!
All hail to thee! all health to thee! all hail to thee, young Nell!
They are on thee, they are on thee; be heedful, O Duntroon!"

His or not, they are alive with the unselfish, reverent devotion of the Celtic heart, which the thing we call civilization has elected to crush out and destroy.

The Celtic heart must worship something; it worshiped you, Highland chiefs, for many a long century, till ou cast it forth from its home to wander hungry and shelterless over the wide earth. The remnant here and there remaining still worships you, if you will give it one kind look, but the major part has groped its way to other lands, or into the great cities, there to worship "freedom" and your own Mmamon god "Wealth"—not you.

Fresh, cool evening draws on; not a shadow is to be seen on all the wall now, for the golden light comes flooding across from behind the Jura peaks, and bathes them in living fire. We hoist our little white sail—the wind has risen and will carry us home gloriously, happy in the breeze blowing through our sail, in the water rippling across our keel, in red clouds and Gaelic chorus; happier yet in the thought that the good in a man's life outlasts the evil, and that for men who seem to us neither very worthy nor very good—some have "even dared to die."

Impromptu Ingenuity.

Scientific American.

Some years ago, a Spanish steamer, while crossing the Bay of Biscay in a severe storm, gave indications, by an unusual noise at the stern, that there was something wrong with the screw propeller or its shaft outside of the ship—that is, in the open space between the stern and rudder posts where the screw revolves. There was no dry dock in any of the ports on the coast where the ship could go to be examined; and on arrival at Vigo it appeared as if there was no alternative but to remove the cargo from the stern, and by placing it forward thus lift the screw propeller and shaft to the surface of the water. The alternative, simple as it was, meant a serious delay and great expense. Before commencing to remove the cargo, another consultation was held. It was then decided to put the stern of the ship over a bed of light colored sand, and as the water was very clear, there might be a possibility of ascertaining the extent or cause of the mishap. For two days after the vessel was so placed, the wind caused a ripple on the water, which effectually prevented anything being seen. It was then suggested by some one on board to try the use of oil on the surface of the water round the stern of the ship. The effect was most satisfactory. The water was becalmed as if by magic, and it was then seen that the wedge or key which keeps the propeller in its place on the shaft had come partly out, and thus left the screw loose on the shaft, which caused the noise. By continuing the use of oil for a few hours the wedge was ultimately driven into its place and secured. Many days of detention and the use of costly appliances and labor were thus saved.

A few years ago an iron bridge of considerable length, the weight being about two hundred tons, was constructed in England, and erected in a remote part of Germany. By some mishap the bridge, when finished, was found to be some distance "out" to one side, an error which the proprietors insisted should be rectified. To take down and reconstruct the bridge would be simply ruin to the contractor. But necessity is the mother of invention, and so it proved in this case. It was summer time, and the contractor proceeded to find the amount of expansion which was caused by the heat of the sun over the whole length of the bridge. He next ascertained what contraction took place in the night by cooling. Armed with these data he thought it might be possible to bring the bridge to its proper position in a few days. The bridge, of course, in its ordinary condition, expanded from the centre, pushing its two ends outward or farther apart, and again contracting toward the centre. Taking advantage of these conditions one end was made fast in the morning, and the bridge was forced to expand from that immovable point instead of from the middle, as formerly. When the iron composing the bridge had expanded to its full extent in the direction intended, that end was released and the opposite end made fast. The bridge then contracted toward its true position. Thus, whatever was gained by the day's expansion was secured by the subsequent contraction when the metal cooled at night, and the process being renewed day by day the work was successfully accomplished.

An ingenious application of expansion and contraction of metals was made use of in France, and has frequently been taken advantage of since. The walls of a large building in Paris were observed to be giving way by bulging outwards, and the problem was to bring them back to their vertical position. For this purpose a number of bars of iron having screws and nuts on each end were let through the opposite walls and across the intervening space between them. The nuts and screwed portion of the bars were outside. The bars were now heated by a number of lamps suspended below them until they had expanded as much as possible, and the nuts screwed up against the outsides of the two opposite walls. The lamps were next removed, when the heated bars, in cooling, gradually contracted in their length, bringing the walls very gently, but with irresistible force, into their normal position.

It is well known that in working iron, such as welding two pieces together, and even in its manufacture, hollow places or flaws occur, with merely an outside skin over the defective parts, which any test but a destructive one would fail to discover. Nor would it be difficult to point out numerous examples of disaster thus occurring. To test the homogeneity of the metal, a bar of iron is placed on the equatorial line. A compass with a very sensitive needle is placed along in front of the bar, the needle of course pointing at a right angle to it. If the bar is perfectly solid through its whole length, the needle will remain steady. If, however, there should be a flaw or hollow place in the bar, the needle will be deflected as it passes from the solid to the hollow place, backward toward the solid iron; passing on over the hollow place, the needle will come within the range of the solid iron at the other end of the flaw, and will again be deflected forward. If the bar be cut through anywhere between these two points of deflection, a flaw will invariably be found. Many thousands of pieces of iron—some prepared for the purpose of testing this method of trial, others in the ordinary course of business—have been operated upon with the same unvarying result.

A striking instance of ingenuity in taking advantage of the resources o nature in an emergency, is found in Sir Samuel Baker's account of his travels in Abyssinia. His stock of soap had become exhausted; and he possessed abundance of various kinds of fat, including that of elephants, hippopotami, lions, and rhinoceros; he determined to convert a quantity of this grease into soap. For this purpose he required both potash and lime; and how were these to be obtained? The negleek tree, he found, was exceptionally rich in potash; he therefore burned a large quantity, and made a strong lye with the ashes, which he concentrated by boiling. There was no limestone, but the river produced a plentiful supply of oyster shells, which, if burned, produce excellent lime. What was next wanted was a kiln in which to burn the shells and this he constructed out of one of those great ant hills, which rise to ten feet high, common to those valleys, and which possess a very hard external crust. Two natives hollowed out one of those hills; a proper draught hole was made below from the outside; it was loaded with wood, and filled with some six bushels of oyster shells, which were again covered with fuel; and after burning twenty-four hours a supply of excellent lime was obtained. Then commenced his soap boiling, which was effected in a large copper pot of Egyptian manufacture. The ingredients of potash, lime and fat were then carefully mixed; and after boiling ten hours, and having been constantly stirred, he obtained excellent soap, of which he had in all about forty pounds weight.

Origin of an Old Adage.

Notes and Queries.

The proverbial saying "the gray mare is the better horse," instead of being Flemish, is more likely of British origin, and may have taken its rise from the following circumstances: A gentleman having married a lady of considerable beauty and fortune, but whose domineering temper and disregard of marital authority on all occasions made his home wretched, entreated her father to take back his daughter, and her dowery into the bargain. "Pooh, pooh," said the old gentleman, "you know not the world. All women govern their husbands, and it is easily proved. Harness the five horses in my stable to a cart, in which I will place a basket containg 100 eggs; leave a horse at every house where the husband is master, and an egg only where the wife governs. If you should find your eggs gone before the horses, you will think your case not so uncommon; but if your horses are disposed of first I will take my daughter home again and you may keep her fortune." At the first house the son-in-law came to heard the wife, in a shrill and angry voice, bid her husband answer the door; here he left an egg without inquiry. He visited a second and third house with the same result. The eggs were nearly all gone when he arrived at the seat of a gentleman of position in the country. Having asked for the master, who happened not to be yet stirring, he was ushered into the presence of the lady. Humbly apologizing for the intrusion, he put the question of obedience; and on the lady replying she was proud to obey her husband in all things, the husband entered the room and confirmed the wife's words, upon which he was requested to choose which horse he liked. A black gelding struck his fancy, but the lady desired he would choose the gray mare, as more fit for a side-saddle. Notwithstanding the substantial reasons why the black horse would be more useful, the wife persisted in her claim for the gray mare. "What!" said she, "and you will not take her, then?" "But you shall, for I am sure the gray mare is much the better horse." "Well, well, my dear," replied the husband, "just as you please, if it must be so." "Oh," quoth the gentleman carter, "you must now take an egg, and I must take all my horses back again, and endeavor to live happily with my wife."

A Chicago editor advertises for a wife who knows less than he does. And if a woman is fool enough to answer the advertisement she will be very sure to be the one he is looking for.

The doctor's daughter: "I declare you're a dreadful fanatic, Mrs. Crizzom. I do believe you think nobody will be saved but you and your minister!" Old lady: "Aweel, my dear, I whiles hae my doubts about the meenister."

OLD LETTER

From All the Year Round.

My letters! written in my earnest boyhood
To one who left us but the other day,
And I am sitting here, and try to read them
Through tears I do not care to brush away.
Tears for my friend, and tears, ah! much more bitter,
For him, myself the self that is as dead
As he to whom these faded things were written,
E'er youth and trust had from my living fled.

It was myself, remember that, who wrote them,
Read them once more, and note the noble life,
The vast endeavor and the desperate struggle
To rise above the grovellers in the strife;
The sacrifice of self for good of others;
The passions at the sufferings of the poor;
The angry fight 'gainst pride, and sin, and riches;
The looking onward when the prize was sure.

Ours, too, the hands to ease the overladen,
Ours the strong voices whose sweet words of truth
Should e'er compel a hearing from the people
Who now but scoffed at our impetuous youth.
The world, awakened, soon would grow much better,
Sin and sorrow, dying in the dust
Would vanish from the earth before the sunlight
Flashed from our swords, whose blades should never rust.

Yet he is dead, and I am old and tired,
I do not care if all the world be sin;
I listen daily to my sons' loud vauntings
Of that bright future they are sure to win.
Ah! burn the letters. As they fall to ashes
Methinks they're like our fading mortal dreams,
Words upon words, and little of fulfillment
Of all was promised by our youth's bright gleams!

PRACTICAL SCIENCE.

Purity of Water.

Prof. Tidy, in a paper read before the London Chemical Society, restates, in reply to Dr. Frankland, his firm conviction that a fairly rapid river, having received sewage in quantity not exceeding one-twentieth of its volume, regains its purity after a run of a few miles and becomes wholesome and good for drinking.

Prussic Acid.

Prussic acid remains for a considerable time in the bodies of animals poisoned with it, and arrest their decay. M. Brame killed a rabbit and a cat by administering to each a gramme of this acid. A month afterward their bodies were found perfectly preserved, the dose being sufficient to permeate the tissues, and to become intimately incorporated with those of the stomach.

Iron Sulphide.

Rusty-colored spots were noticed on some hammock canvas used by the French army in Algeria. Dr. Tripler reported that when the canvas was washed dark spots appeared, and the material soon fell to pieces. M. Balland made this matter the subject of a paper read on Feb. 28th before the French Academy of Sciences, and said that the spots were probably due to iron sulphide, produced by alkaline sulphides in the artificial soda, and by iron oxide fixed by the stuff in manufacture. The sulphide passed into the state of sulphate under atmospheric influences by a combustion which caused a destruction of the canvas.

Electric Light.

Mr. J. W. Swan, in a paper on the subdivision of the electric light, does not hope for any extensive and economical subdivision of the light by lamps in which there is combustion. The true incandescent lamps prevent the combustion of the carbon in one of two ways—either by the entire exhaustion of the air from the chamber in which the heated carbon is placed, or by the filling of the chamber with an inert gas such as nitrogen. Both these expedients were tried by the early inventors, and both have still their advocates. The early experimenters failed to accomplish what they sought from three causes, any one of which was sufficient to bar the way. First, the carbons employed were so thick as to require a large current to produce the required temperature in them; second, the carbons were not durable, and third, the lamp-glass speedily became obscured. He showed that it was the invention of the Sprengel pump, and the use Mr. Crookes showed could be made of it, that has caused modern electricians to be so successful as they are in obtaining electric light by incandescence.

Products of Tobacco.

Dr. Le Bon continues his researches regarding the products of tobacco. The new alkali found in tobacco smoke (with other aromatic principles, and prussic acid as well as nicotine) is a liquid of very agreeable and very penetrating odor, and as poisonous as nicotine, the twentieth part of one drop sufficing to paralyze and kill a frog. It is the prussic acid and the various aromatic principles that cause headache, giddiness, and nausea in smoking certain tobaccos that contain little nicotine. Other tobaccos, rich in nicotine, have no such effects. The tobaccos contain most prussic acid and collidine are those of Havana and the Levant. The dark, semi-liquid matter which condenses in pipes and cigar-holders contains all the substances mentioned, as well as carbonate of ammonia, tarry and coloring matter, etc. It is very poisonous. Two or three drops of it will kill a small animal. The combustion of the tobacco destroys but a small part of the nicotine, and the most of this appears in the smoke. The proportion absorbed by smokers varies according to circumstances, but hardly ever falls short of 50 centigrammes for every 100 grammes of tobacco burned. About the same quantity of ammonia is absorbed at the same time. Naturally, more of the poisonous principles are absorbed when the smoke is breathed, as in a room; less in the open air. A frog placed in a receiver containing a solution of nicotine, with about a drop of that substance to a little water, succumbs in a few hours. Tobacco smoke contains about 8 millilitres of carbonic oxide per 100 grammes of tobacco burned. The poisonous properties of tobacco smoke are not due to this gas, as has been maintained in Germany.

Will the Electric Light Tan.

New York World.

There being such a diversity of opinion on this important subject among those directly interested, some expert testimony was sought. Dr. George M. Beard said: I studied the electric light with Mr. Edison for a long time, but I confess this is a problem that never had suggested itself to me. Yet, I should think the electric light ought to tan. I should not, however, say that as subdivided by Edison it would tan to the same extent as the lights of the powerful single burners like those on Broadway and in the stores. But the difference would be one of degree, and not of kind. All forms of light might tan to a certain extent if the face is kept a long time exposed to them. I see no way of settling the question of degree except by comparative experiments, and such experiments are now going on in every large city in the country. A slight amount of tanning would be more than compensated for by the greater healthfulness of the light in other respects. What is the philosophy of tanning? It is a chemical action, and we don't know much about chemistry. Heat bakes a loaf of bread, and might be said to tan it. Exposure to the sun's rays increases and deranges the pigmentary deposit of the skin. There is a great difference in skins, but all human skins are incomparably more sensitive to the chemical rays from a light than carpets or the most delicate fabrics, and because the electric light tans it would not be fair to conclude that it would fade cloths. I do not think that at all probable."

Dr. George H. Fox said: I have heard ladies complain that the electric light would tan them and injure their complexions, but more complain of its clear white light exposing imperfections that the dim gas-light conceals. As photographs can be taken by the use of the electric light, I see no reason why it should not tan. I should judge that it would. Just exactly what change takes place in the process of tanning is not definitely known. If a person sits long enough in front of a fire he may be tanned or wind may tan a person."

The English in Japan.

BY E. H. HOUSE.

May Atlantic.

The plainest evidence indicates a settled purpose to impoverish the country, render it incapable of maintaining its own industries, make it dependent upon England for supplies, and so hamper the public finances as to compel, if possible, the negotiation of British loans which, again, shall be used as new instruments of oppression, until, while preserving the outward aspect of autonomy, it shall be virtually degraded into the condition of India. It is startling to discover, as may be done by minute scrutiny, to what extent this precious design has already been wrought out. Nothing but the fact that beneath the easy and docile bearing of the populace there exists a spirit—predominantly among the cultivated classes—of sturdy self-respect and intense pride of race saves the outlook from desperation. There is not upon the earth a more passionately patriotic community than the samurai, or gentry of Japan. Pride, however, is anything but a protection against humiliation, and patriotism does not afford a refuge from grinding want. Many of the people are bitterly and miserably poor,—a thing almost unknown before the advent of strangers,—and the deprivations of poverty are on the increase. One of the numerous baleful results of foreign machinations is a heavy depreciation of the domestic currency, brought about, presumably, with the view of weakening the national credit; the immediate effect of which is to destroy the government's power of succoring the distressed by direct bounty, or building up safeguards against pauperism by promoting industrial enterprises. All it can do is to sustain its high character for integrity, by meeting every engagement with honorable promptness; and this it will do to its last hour. Meanwhile, it looks among those who have brought these sorrows upon the country for some token of sympathy or consolation, and sees no sign. If it turn to England's agents, feebly hoping against hope defeated a hundred times, the most it gets is a cheerful discourse upon the blessings of "free trade," which the great island kingdom of the West would fain implant in the little island empire of the East. So long as Japan is tending toward that blissful consummation, an absolutely unrestricted commerce, it is impossible that its political machinery can work otherwise than happily and well. The ruin of a mass of cotton producers, the suffering of millions concerned in the manufacture and sale of that staple, the paralysis of a dozen, or a hundred, domestic industries, and the slow starvation of the helpless victims to alien greed,—these are trifles to which the promoters of a lofty economic principle can give no heed. But what have the Japanese to say upon this head? To them the idea of one nation, whose annual customs revenue is a hundred millions, prating about perfect freedom of trade to another, which collects only two millions, and has no intention of collecting more than eight or ten, is the extremity of impudence and absurdity. England undoubtedly has greater needs than Japan, but Japan assuredly has some. What covers the English pretense of untrammeled commercial intercourse with overwhelming mockery, in their eyes, is the circumstance that Great Brtain imposes a tax of larger amount upon its imports from Japan than the entire customs revenue of Japan from every source. More than this, the income to the British treasury proceeding from duty upon a single Japanese product is greater than all the customs receipts of Japan put together. The knowledge of this is sufficient to outweigh all the financial theories that the English legation can bring forward. But the English legation has a "might" behind it, against which Japan's assertion of indisputable "right" can never prevail.

THE MARTYRDOM OF AN EMPIRE.

BY E. H. HOUSE.

May Atlantic.

The opening of Japan, as every one is aware, was effected by the United States of America. Precisely what this country intended to accomplish by that imposing deed it would be difficult to say. What it did accomplish was to open a clear way for the realization of one of Great Britain's most ardent hopes. Our commercial needs have never been pressing, but the extension of English trade began to be, a quarter of a century ago, a matter of extremest importance to the merchants and manufacturers of that kingdom. Everything that could be done to facilitate Lord Elgin's plans was done by our representative. He gave the new comer a copy of the American treaty, instructed him in the methods of transacting business in the unfamiliar geld, and lent him a Dutch interpreter, without whose aid he could not have communicated an intelligible idea. All this was in accordance with the demands of high courtesy, and in due time Mr. Harris received an inestimable token of recognition in the shape of a royal snuff-box; but if he had foreseen what was to follow in after-years, he never would have moved a hand in aid of British ingress to Japan. The discrepancy in customs duty above mentioned was the first manifestation of a determined resolve to break down every obstacle to the untaxed admission of English goods, no matter at what cost or injury to the freshly opened nation.

It is here necessary to describe with precision the unfortunate mistake in Mr. Harris's convention of 1858,—that mistake which, in spite of his good intentions throughout, has been to Japan "the direful spring of woes unnumbered." As he has frequently declared, he never intended nor expected that the treaty should represent anything but a temporary arrangement. It was intended to cover the term of fourteen years in its political provisions, and five years in its tariff stipulations. It did, indeed, provide for a readjustment of the customs duties in 1863, in case the Japanese government should desire it. But the date of a general revision was fixed at 1872. This revision was to take place upon the demand of either of the contracting parties. Contrary to the common rule, no limit was assigned to the operation of the treaty. It was, in fact, interminable, unless a revision could be agreed upon in 1872 or later. If its terms had been mutually beneficial, or the reverse, there would probably have been no objection to a partial or a thorough reconstruction, as the case might be. It is easy to understand, however, that if it were strongly to the disadvantage of one side the other would have a powerful interest in opposing any change. And so it has been. The working of the treaty has proved flagrantly injurious to Japan, and proportionately favorable to the foreign powers,—exceptionally favorable to England, that country having the most extensive trade connection. Under these circumstances, the English representative has always met the appeals of the Japanese for revision with evasion, or with counter-proposals so monstrous as to destroy all hope of a just negotiation. The weaker party has had no choice but to submit to the prolonged infliction of a cruel burden; the only alternative—unless some nation be led, in the name of international honor, to speak a rescuing word on her behalf—being a downright renunciation of the oppressive enactment, which might entail the perils of an unequal war.

A Costly Ironclad.

London Truth.

The Inflexible is a costly ship. Her hull cost nearly £500,000, and her engines and machinery almost another £100,000; but even the estimates will not show what the total expenditure, direct and indirect, will have been upon her before she is ready for her trial commission, and "authorities" who usually swear by Admiralty calculations are admitting that the outlay before her completion may be from thirty to forty per cent. more than had been originally expected. The cost of her hydraulic machinery and appliances is a little eye-opener. They have been supplied by Messrs. Armstrong & Co., of the Elswick Foundry, whose bill is now before their lordships. It only amounts to rather more than £40,000, half of which is for "mounting the four eighty-ton guns," which means furnishing the hydraulic fittings for them.

Carried off the palm—The shot that deprived a soldier of a hand.

It was a wealthy Philadelphian who, being asked, on his return from Europe, how he liked the Bosphorus, replied that he didn't eat any and preferred the ordinary home-made sausages.