THE WILD GEESE

BY Stanley J. Weyman.

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Synopsis of Previous Chapters

Colonel John Sullivan, an Irish soldier, who has served abroad for many years, returns to his native Kerry on the sloop Cormorant, a French smuggling vessel, laden with Bordeaux wines. The cargo of the sloop is seized by the natives of Skull, against the futile protests of Captain Augustin, who realizes that he has no law on his side.

Colonel Sullivan is coldly received by Flavia and her brother, The McMurrough, because of his alian faith and his undesirable position as their legal guardian. When Captain Augustin returns with Luke Asgill, the nearest justice, and demands the return of the confiscated cargo, Flavia and her guardian are in favor of returning the cargo on the captain's payment of the dues. The McMurrough objects to this, but finally agrees to it on Colonel Sullivan's offer to get back Flavia's favorite mare, which was seized by British soldiers. The Colonel and his servant, Bale, set out and find the mare at the barracks of Tralee. The Colonel is invited into the mess room by the English officers, and one of them, named Payton, who seized the mare, throws wine in his face. The Colonel refuses to fight, because his right arm is permanently disabled. He wins a left-handed fencing bout with the maitre d'armes, at the same time winning the mare on a wager. At dinner upon his return to Morristown, he is amazed when Flavia drinks a toast "to the King across the water" and fears that a rising is contemplated. His fears are realized next morning when his kinsman, Ulick, warns him to leave the place and the people to their fate. The Colonel refuses and next morning after breakfast is invited to join a family council of war. He refuses to join the proposed uprising, knowing its futility. Fearing that the Colonel may turn informer, The McMurrough and his friends imprison him and his servant Bale. The next morning the two are led out to their death by the agent of The McMurrough, O'Sullivan Og. At the last moment this sentence is revoked and the Colonel and Bale are rowed out through the mist to imprisonment on a Spanish war ship in the harbor. The rowboat capsizes and the two prisoners, luckily escaping, take refuge on the French sloop. Captain Augustin and his sailors, under the Colonel's direction, steal to the house at Morristown under cover of the fog, and seize and imprison the leaders of the uprising on the sloop. The Bishop and Admiral Cammock are to be carried to sea for a period and The McMurrough, on swearing that he will attempt nothing against Colonel John nor against the government, is released and he returns to Morristown with the Colonel. Flavia, incensed at his return and the failure of the uprising, attacks the Colonel, who narrowly escapes death at her hands. She and her brother find the Colonel's presence irksome and consider means of getting rid of him. When Asgill comes wooing Flavia, and because of earlier treachery is forbidden the house by the Colonel, The McMurrough and his sister rebel at the Colonel's authority. Flavia induces the Colonel to send away his faithful servant, Bale, on the plea that he may be injured by the inimical peasantry. She then lures the Colonel to an old tower at night and has him imprisoned there.

CHAPTER XIX.

Peine Forte et Dure

FOR many minutes Colonel John sat motionless in the chair into which he had sunk, his eyes fixed on the flames of the candles. His unwinking gaze created about each tongue of flame strange effects of vapor, halo-like circles that widened and again contracted, colors that came and went. But he saw these things with his eyes without seeing them with his mind. It was not of them, it was not of the death-cold room about him, it was not of anything within sight he was thinking, but of Flavia.

Of Flavia, who had deceived him, duped him, cajoled him. Who, by affecting a quarrel with her brother, had thrown him off his guard and won his confidence, only to betray it. Who, having lured him thither, had laughed—had laughed! As he sat and thought of her treachery he looked years older. It cut him to the heart.

At length, with a sigh drawn from his very soul, he roused himself and, taking a candle, he made the round of the chamber. The door by which he had entered was the only outlet, and it was of stout oak, clamped with iron and locked. For windows, a pair of loopholes, slits so narrow that on the brightest day the room must be twilit, pierced the wall toward the lake.

The walls were two feet thick and the groined roof was of stone, hard as the weathering of centuries had left it. But not so hard, not so cruel as her heart! Flavia! The word almost came from his lips in a cry of pain.

Yet what was her purpose? He had been lured hither, but why? His eyes fell on the table; the answer would doubtless be found among the papers that lay on it. He sat down in the chair set before it and took up the first sheet that came to hand—a note of a dozen lines in her hand-writing.

"Sir," so it ran—

"You have betrayed us, and were that all I'd still be finding it in my heart to forgive you. But you have betrayed also our country, our King and our faith, and for this it's not with me it lies to pardon. Over and above, you have thought to hold us in a web that would make you safe at once in your life and your person, but you are meshed in your turn and will fare as you can without water, food or fire, until you have signed and sealed the grant which lies beside this paper. We're not unmerciful, and one will visit you once in twenty-four hours until he has it under your hand, when he will witness it. That done, you will go where you please, and heaven forgive you. I who write this am, though unjustly, the owner of that you grant, and you do no wrong.

"FLAVIA McMURROUGH."

He read the letter with a mixture of emotions. Beside it lay a deed, engrossed on parchment, which purported to grant all that he held uder the will of the late Sir Michael McMurrough to Constantine Hussey, Esquire, of Duppa. But annexed to the deed was a separate scroll, illegal but not unusual in Ireland at that day, stating that the true meaning was that the lands should be held by Constantine Hussey for the use of The McMurrough, who, as a Roman Catholic, was not capable of taking them in his own name.

Fully, only too fully, enlightened by Flavia's letter, Colonel John barely glanced at the parchments, for, largely as these bulked on the table, the gist of all lay in the letter. He had fallen into a trap—a trap as cold, cruel, heartless as the bosom of her who had decoyed him hither. Without food or water! And already the chill of the earthen floor was eating into his bones, already the damp of a hundred years was creeping over him.

He sat gazing at the paper with dull eyes. For, after all, whose interests had he upheld? Whose cause had he supported against James McMurrough and his friends? For whose sake had he declared himself master at Morristown, with no intention, no thought, as heaven was his witness, of deriving one jot or one tittle of advantage for himself? Flavia's! And she had planned this! She had consigned him to this, playing to its crafty end the farce that had blinded him!

His mind travelled back to the beginning of it all, to the day on which Sir Michael's letter, with a copy of his will, had reached his hands, at Stralsund on the Baltic, and his quarters beside the East Gate. The cast of his thoughts at the reading rose up before him. The recollections of his home, his boyhood, his father, which the old man's writing had evoked, and the firmness with which, touched by the dead man's confidence, he had resolved to protect the girl's interest, that the old man's confidence should be justified, the young girl's heritance secured to her—this had been the purpose in his mind from first to last.

And this was his reward!

True, that purpose would not have embroiled him with her if it had not become entwined with another—with the resolve to pluck her and hers from the abyss into which they were bent on flinging themselves. It was that resolution which had made her his enemy to this point. But he could not regret that—he who had seen war in all its cruel phases, and fierce rebellions, and more cruel repressions. Perish—though he perished himself in this cold prison—perish the thought! For even now some heat was kindled in him by the reflection that, whatever befel him, he had saved scores from misery, a country-side from devastation, women and children from the worst of fates. And though he never saw the sun rise again, he would at least pass beyond with full hands, and with the knowledge that for every life he, the soldier of fortune, had taken, he had saved ten.

At the end of two hours he roused himself. He was very cold, and that could only be mended by such exercise as the size of his prison permitted. He set himself to walk briskly up and down. When he had taken a few turns, however, he paused with his eyes on the table. The candles? They would serve him the longer if he burned but one at a time. He extinguished three. The deed? He might burn it and so put the temptation, which he was too wise to despise, out of reach. But he had noticed in one corner a few half charred fragments of wood, damp indeed, but such as might be kindled by coaxing. He would preserve the deed for the purpose of kindling the wood; and the fire, as his only luxury, he would postpone until he needed it more sorely. In the end the table and the chairs—or all but one should eke out his fuel; and he would sleep. But not yet.

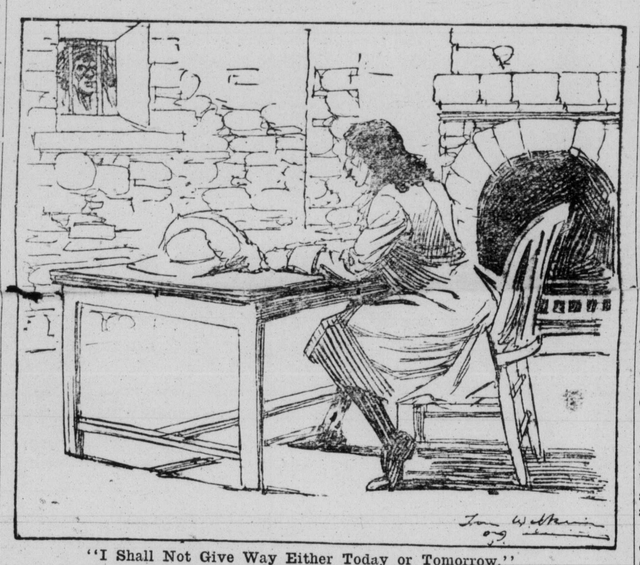
He had no desire to die, and with warmth he knew that he could put up for a long time with the lack of food. Every hour during which he had the strength and courage to bear up against privation increased his chances; it was impossible to say what might not happen with time. Uncle Ulick was due to return in a week—and Bale. Or his jailers might relent. Nay, they must relent for their own sakes, if he bore a stout heart and held out; for until the deed was signed they dared not let him perish.

That was a good thought. They could put him on the rack, but they dared not push the torment so far as to endanger his life. He must tighten his belt, he must eke out his fuel, he must bear equably the pangs of appetite; after all, in comparison with the perils and privations through which he had passed on the cruel plains of Eastern Europe, and among a barbarous people, this was a small thing.

Or it would have been a small thing if that sadness at the heart which had held him motionless so long had not still bowed his head upon his breast. A small thing! A few hours, a few days even of hunger and cold and physical privation—no more! But when it was overpast, and he had suffered and was free, to what could he look forward? What prospect stretched beyond, save one grey, dull and sunless, a homeless middle age, an old age without solace? He was wounded in the house of his friend and felt not the pain only, but the sorrow. In a little while he would remember that, if he had not to take, he had still to give; if he had not to enjoy, he had still to do. Already shadowy plans rose before him.

His had been a mad fancy, a foolish fancy, a fancy of which—for how many years rolled between him and the girl, and how many things done, suffered—seen—he should have known the outcome. But it had mastered him slowly, not so much against his will as without his knowledge; until he had awakened one day to find himself possessed by a madness, the more powerful because he was no longer young. By and by, for a certainty, the man's sense of duty, the principles that had ruled him so long, would assert themselves. He would go back to the Baltic lands, the barren, snow bitten lands of his prime, a greyer, elder, more sombre—but not an unhappy man.

Something of this he told himself as he paced up and down the gloomy chamber, while the flame of the candle crept steadily downward. It must be midnight; it must be two; it must be three in the morning. The loopholes, when he stood between them and the candle, were growing grey; the birds were beginning to chirp. Presently the sun would rise, and through the narrow windows he would see its beams flashing on the distant water. But the windows looked northwest and many hours must pass before a ray would strike into his dungeon.



"I Shall Not Give Way Either Today or Tomorrow."

The candle was beginning to burn low and it seemed a pity to light another with the daylight peering in. But if he did not he would lack the means to light his fire. And he was eager to do without the fire as long as possible. He was cold now, but he would be colder by and by and his need of the fire would be greater.

From that the time wore wearily on to the breakfast hour. The sun was high now; the birds were singing sweetly in the rough brakes and brambles about the Tower; far away on the shining lake, of which only the farther end lay within his sight, three men were fishing from a boat. He watched them; now and again he caught sight of a tiny splash as they flung the bait far out. So watching with no thought or expectation of it, he fell asleep, and slept for five or six hours the sleep of which excitement had cheated him through the night. In warmth, morning and evening, night and day differed little in that sunken room. Still the air in it profited a little by the high sun; and he awoke, not only less weary, but warmer. But, alas! He awoke also hungry.

He stood up and stretched himself, and seeing that two-thirds of the second candle had burned away while he slept, he was thankful that he had lit it. He tried to put away the visions of hot bacon, cold round, and sweet brown bread that rose before him. He wondered how far the plot would be carried; and thus mind got the better of body, and he forgot his appetite in a thought more engrossing.

Would she come? Every twenty-four hours, her letter said, a person would visit him. Would she be the person? It was wonderful with what interest, nay, with what agitation, he dwelt on this. How would she look? How would she bear herself? How would she meet his eye? Would she shun his gaze, or would she face it without flinching, with a steady color and smiling lip? If the latter were the case, would it be the same when hours and days of fasting had hollowed his cheeks, and given to his eyes the glare which he had seen in many a wretched peasant's eyes in those distant lands? Would she still be able to view his sufferings without a qualm, and turn, firm in her cruel purpose, from dumb pleading of his hunger?

"God forbid!" he cried. "Ah, God forbid!"

And he prayed that, rather than have [illegible] hardness of heart, he [illegible] at all. Yet, so weak [illegible] to see how [illegible] was now the one hope [illegible] to lighten the time, and [illegible] the attacks of hunger! He [illegible] twenty-four hours.

[illegible] thought possessed him to an ex[illegible] extent. Would she come? [illegible] lured him into his enemies' [illegible] would she leave him to be treated as [illegible] chose, while she lay warm and safe in the house which his interference had saved for her?

Oh! cruel!

Then the very barbarity of an action so unwomanly suggested that, viewed from her side, it must wear another shape. What was this girl gaining? Revenge, yes; yet, if they kept faith with him, and, the deed signed, let him go free, she had not revenge. For the rest, he lost by the deed. All that her grandfather had meant for her passed by it to her brother. To lend herself to stripping herself was not the part of a selfish woman. Even in her falseness there was something magnanimous.

He was still staring dreamily at the table when a shadow falling on the table roused him. He lifted his eyes to the nearest loophole, through which the setting sun had been darting its rays a moment before. Morty O'Beirne bending almost double—for outside, the narrow slit was not more than two feet from the ground—was peering in.

"Ye'll not have changed your quarters, Colonel," he said, in a tone of raillery, which was assumed perhaps to hide a real feeling of shame. "Sure, you're there, Colonel, safe enough?"

"Yes, I am here," Colonel John answered austerely. He did not leave his seat at the table.

"And as much at home as a mole in a hill," Morty continued. "And, like that same blessed little fellow in black velvet that I take off my hat to, with lashings of time for thinking."

"So much," Colonel John answered, with the same severe look, "that I am loth to think ill of any. Are you alone, Mr. O'Beirne?"

"Faith, and who'd there be with me?" Morty answered in true Irish fashion.

"I cannot say. I ask only, are you alone?"

"Then I am, and that's the truth," Morty replied, peering inquisitively into the corners of the gloomy chamber. "More by token I wish you no worse than just to be doing as you're bid—and faith, it's but what's right!—and go your way. 'Tis a cold, damp, unchancy place you've chosen, Colonel," he continued, with a grin; "like nothing in the wide world so much as that same molehill. Well, glory be, it can't be said I'm one for talking; but, if you're asking my advice, you'll be wiser acting first than last, and full than empty!"

"I'm not of that opinion, sir," Colonel John replied, looking at him with the same stern eyes.

"Then I'm thinking you're not as hungry as I'd be! And not the least taste in life to stay my stomach for twenty-four hours!"

"It has happened to me before," Colonel John answered.

"You're not for signing then?"

"I'm not."

"Don't be saying that, Colonel!" Morty rejoined. "It's not yet awhile, you're meaning?"

"Neither now nor ever." Colonel John answered. "I quote from yourself, sir. As well say it first as last, and full as empty!"

"Sure, and ye'll be thinking better of it by and by, Colonel."

"No."

"Ah, you will," Morty retorted, in that tone which to a mind made up is worse than a blister. "Sure, ye'll not be so hard hearted, Colonel, as to refuse a lady! It's not Kerry-born you are, and say the word 'No' that easy!"

"Do not deceive yourself, sir," Colonel John answered severely, and with a darker look. "I shall not give way either today or tomorrow."

"Nor the next day?"

"Nor the next day."

"Not if the lady asks you herself? Come, Colonel."

Colonel John rose sharply from his seat; such patience, as a famished man has, comes to an end.

"Sir," he said, "if this is all you have to say to me I have your message, and I prefer to be alone."

Morty grinned at him a moment, then with an Irish shrug he gave way. "As you will," he said.

Morty, poking his head this way and that, peering into the chamber as he had peered yesterday, wished he could see Colonel John's face. But Colonel John, bending resolutely over the handful of embers that glowed in an angle of the room, showed only his back. Even that Morty could not see plainly; for the last of the candles had burned out, and in the chamber, dark in comparison with the open air, the crouching figure was no more than a shapeless mass obscuring the glow of fuel.

"And that's your last word?" he said slowly. "Come, Colonel dear, ye'll say something more to that."

"That's my last word today," Colonel John answered as slowly, and without turning his head.

"Honor bright? Won't ye think better of it before I go?"

"I will not."

"And I'm to tell her so?" Morty concluded.

Colonel John rose sharply, as if at last the other tried him too far. "Yes," he said, "tell her that! Or," lowering his voice and his hand, "do not tell her, as you please. That is my last word, sir! Let me be."

Morty paused, to tell the truth, in extreme exasperation. He had no great liking for the part he was playing; but why couldn't the man be reasonable? "You're sure of it, Colonel," he said.

Colonel John did not answer.

Morty shaded his eyes and peered more closely. He was not a sensitive person, and he was obeying orders. But he was not quite comfortable.

He withdrew himself suddenly and the sunset light darted into the room through the narrow window, dimming the candle's rays. The Colonel heard him laugh as he strode away across the platform and down the hill. A moment and the sounds ceased. He was gone. The Colonel was alone.

Until this time tomorrow! Twenty-four hours. Yes, he must tighten his belt.

But it was not his last word. For as Morty turned to go, the Colonel heard him speak—in a lower and a different tone. At the same moment, or his eyes deceived him—a shadow that was not Morty O'Beirne's fell for one second on the splayed wall inside the window. It was gone as soon as seen; but Colonel John had seen it, and he sprang to the window.

"Flavia!" he cried. "Flavia!"

He paused to listen, his hand on the wall on either side of the opening. His face, which had been pinched and haggard a moment before, was now flushed by the sunset. Then "Flavia!" he repeated, keen appeal in his voice. "Flavia!"

She did not answer. She was gone. And perhaps it was as well. He listened for a long time, but in vain; and he told himself again that it was as well. Why, after all, appeal to her? How could it avail him? Slowly he went back to his chair and sat down in the old attitude over the embers. But his lip quivered.

(To be continued)

Sporting Chat

J. L. SULLIVAN ON THE BIG FIGHT

WHILE we are sizing up the straws that show which way the big scrap wind is blowing, don't forget to take a glance at that goodly wisp that John Lawrence Sullivan—nee of Boston—set free the other day. A wise old boy this same J. Lawrence, and always mighty clever in getting at the core of things.

"'Tis the stomach that does the business," says J. Lawrence. "Give a man a good stomach and the rest will follow," he says, "but the Lord help the man who goes in for a hard fight with a stomach inside of him that has been scorched," he says, "overdone," he says. "I had one of the same sort when Slim Jim Corbett put me away nice and easy," says he; "but 'twas the stomach that beat me and not Corbett," he says, and shakes his old grey head, sore today as he was when he was beaten by a man whom he couldn't lay a glove on try as he would.

John L. is wiser now than he was then. He has had time to sort things out a bit and to be sorry that he spent a million spoiling his stomach and with it his fighting. He found out too late that even a strong boy's stomach isn't built to stand the acid test in floods and often. He knows now that when the stomach is out of fix that everything else in a man's body goes on strike, too, and he is all wrong. He's cross, he's quaking, he's vexed at nothing and sees nothings in shoals. His work goes wrong and his play tags along to keep company. Grub is bad, drink looks dark and gloomy. Let a man who is that way try to fight and he gets licked, says John L., the old-time champion, the beater of all men, but who got his dose when his stomach refused to scratch.

A wise old boy is John L. I had the pleasure of meeting him once. He umpired a ball game that I was interested in, and you can gamble that there wasn't any ungentlemanly squabbling in that game. When John said a man was out he was out, even if he wasn't. But John L. didn't give many bad decisions and there wasn't really much kicking coming to the players, anyway.

Before the game was the best time to look J. Lawrence over, and I took my chance then. There has always been a lot of slush handed out about John L.—making him talk tough, and all that—and I was anxious to hear him speak in his ordinary way. I got my chance. Everybody was anxious to hear the big chap talk, and so they clustered about John and baited him with questions: long questions, short questions, wise questions, silly questions—mostly the last kind—and there he sat and answered the whole outfit as patiently and sensibly as though he had been hired for the express purpose and was getting big pay. There wasn't a trace of toughness in his speech nor the least bit of churlishness in his replies. He's a wise old boy, is John Lawrence, and what he said about the stomach is true and more than true. Jeffries' stomach? Oh, I don't know; ask Jeff.

* * *

AIN'T IT AWFUL?

WHAT! the settlers around Teulon have been breaking the game laws? Awful! surprising! and, as the neurotic reporter hath it, startling! Who was startled besides the chief game guardian, I wonder. Of course it was a deadly shame to startle him and right in the winter, too. Travelling is bad in winter, and running about is a serious thing, anyway, after a chap has got so used to sitting in one spot that his chair creaks even when he isn't in it, just from habit. But why anybody should be startled to know that moose are being killed out of season is a deal more than an unimaginative person like myself can figure out. Pretty soon somebody'll be startled to know that prairie chickens are shot out of season, and that a good many duck hunters are so weak at figures that they can't count straight.

Now listen and see what you know about startling a chief game guardian, whose life work is supposed to be made up of seeing that the game laws are observed.

A man was out with his dog having a look about where there might be chickens. Came two halfbreeds with a rig and said, "You look for to kill chickens?" "No," said the man with the dog, "I'm just looking about a bit." "Oh, you no be afraid of us; we kill 'em too." And with that they pulled the cover from a big bunch of birds all killed out of season. Well, this man told our chief game guardian of the circumstance, and the officer said, "Why didn't you arrest 'em?" And so he might have, but it isn't really the business of a private citizen to be arresting men who break the game laws—or any other laws, for that matter. We have officers who are paid to do that and it is their day's work to do it, just as it is another man's day's work to build houses, to do farm work, to plead cases at law, or to do any of the thousand things that must be done. They don't ask the game guardian to do any of these things for them, and the forbearance should be returned in kind.

A SUBSTITUTE FOR TWINE

FOR many years the Department of Agriculture experimented with a view to finding a substitute for the sisal hemp, from which binder twine is made.

This strong cord, with which the harvesting machines tie up the bundles of wheat, is indispensable to the Western farmer. Its manufacture has reached such proportions that binder twine plays an important part in each new tariff schedule, and has absorbed the attention of politicians as well as of farmers.

The United States has depended upon foreign countries for the raw material, and a powerful trust controls its manufacture. These facts give peculiar significance to the successful outcome of the experiments of the Department of Agriculture.

The material which has now proved its commercial importance is the strong wiregrass of the slough lands of Wisconsin, Minnesota, and other Western States. The plant, known to botanists as Carex stricta, is very abundant, but has always been considered valueless.

The process of manufacture consists of washing the grass, combing to separate the fibres, and spinning in a specially devised machine which twists a fine protecting yarn in with them, thereby insuring the evenness necessary to use in harvesting machines. The waste is made into bottle covers, and a cheap and very durable floor matting is also woven from the grass. This twine sells for one-third or less than the twine formerly used, and is said to do its work equally well.

MAN'S MILLION YEARS

ACCRODING to the conclusions of a well-known British ethnologist, the first creatures that could properly be called men appeared on the earth somewhere about a million years ago. The precursor of man, it is thought by this authority, was some such apelike creature as the pithecanthropus erectus discovered in Java some decades ago, or the fossil remains dug up in France a year or two ago.

Four varieties of men, it is further contended, were developed. Homo Ethiopicus in Africa south of the equator, Homo Mongolicus in Central Asia, Homo Americanus in the New World, and Homo Caucasicus in northern Africa. From these the existing races, it is added, are descended. Whether man has existed a million years in the past or not, there is no apparent reason why he should not exist more than a million years in the future.

THE LARGEST BATTLESHIP IN THE WORLD

THE battleship Utah, which was launched recently in the Delaware River at Camden, New Jersey, is the largest warship afloat, the nearest approach to her displacement of 21,825 tons being the United States battleships Delaware and North Dakota, which are of about 20,000 tons, and the British ships of the Neptune class, which are also of about 20,000 tons displacement.

The Utah is 551 feet in length by 88 feet in breadth and is expected to have a speed of more than twenty knots per hour. She will be driven by turbine engines developing 28,000 horse-power. Her main battery will consist of ten twelve-inch guns located in five armor-clad turrets, and two submerged torpedo tubes. The secondary battery has sixteen five-inch guns, and ten smaller guns of three-inch and less to be used in saluting. The armor on the turrets ranges in thickness from twelve to eight inches, and that on the side belt from eleven to nine inches. All ten of the twelve-inch rifles may be used with equal facility on either broadside, giving tremendous offensive power so concentrated as to be most effective.

The most remarkable thing about the Utah is the short time in which she has been built, the keel having been laid March 15th of last year, thus making the time on the stocks in the neighborhood of six months. This is a record in battleship construction for this country, if not for the world.

PAPER OF BAMBOO PULP

WILL the world's future supply of paper pulp be derived from the bamboo forests of the tropics instead of being drawn from the forests of the temperate zones? A tentative affirmative answer to this question could be made by a paper mill which has recently made very satisfactory experiments with bamboo pulp at its site.

This company has the utmost confidence in the results of its experiments with bamboo pulp. It has been granted a perpetual lease of 8,000 acres of bamboo forest in Formosa, and is now engaged near Kagi in installing the machinery for a plant with a capacity of 300 tons of bamboo pulp a month, and the capacity can easily be enlarged to 600 tons a month.

The making of paper from bamboo is no recent discovery. For generations the Chinese have carried on this industry in their homes, but their methods are exceedingly primitive—no chemicals entering into their process. The Chinese use only bamboo shoots, for the evident reason that the shoots can be more readily worked up.

The new company will use all kinds of bamboo, young and old, but particularly a variety called "kei chiku," of which there is an unlimited quantity. The question of the supply of raw material will never puzzle the company, for the growth of bamboo is very rapid. It verily grows inches in a night.

The experiments so far have been made by mixing bamboo pulp and wood pulp in varying proportions, according to the quality of paper desired. But it is intended later to make paper entirely from bamboo pulp; the only difficulty standing in the way of that process now is that the cost of an entire bamboo paper is more than the cost of wood pulp paper. It is expected that all the machinery of this company will be in full operation by June, 1910. The process employed will be a modified sulphite, specially prepared by the company from bamboo. There are eight different stages in the manufacture: (1) The preparation of the bamboo by chopping into small pieces from one to two inches in size; (2) cooking or digesting in a digestor with sulphite of calcium; (3) washing with water; (4) bleaching with powder or electricity and washing again; (5) drawing through a machine to press into the form of web; (6) drying by steaming; (7) rolled by winding machine, or cut into sheets.

The pulp will be shipped to Japan where it will be manufactured into two grades of paper—news and book. On the Formosan pulp factory, and on the mills at Kobe, where the finished bamboo product will come forth, much interest will be centred by the great paper industries of the world.