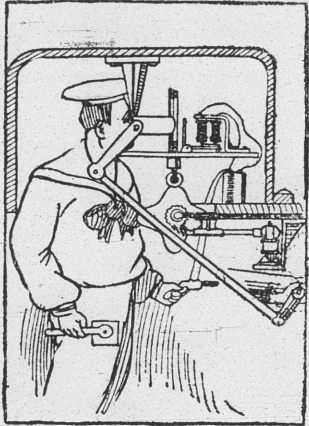


USE FOR SIGHTING MACHINE.

How Twelve-Pounders on Battleships Are Aimed and Fired.

Few people are aware of the methods employed to sight the large twelve-pounders on modern battleships, says the Philadelphia Record. It is generally supposed that the gunner sights these immense cannon as he would an ordinary rifle. Such is not the case, however. An illustration of the method employed is shown here, the apparatus being the invention of a gunner in the United States Navy. The apparatus is exceedingly complicated and is practically useless in the hands of a novice. In one hand the gunner grasps an ordinary pistol. This pistol is connected to the firing apparatus of the gun. Above the pistol is a sighting tube and a number of reflecting glasses. By means of re-



Sight the Gun.

fecting glasses the surroundings are brought into the range of the pistol. The gunner need only sight the pistol to hit a certain object on the reflecting glasses. As he brings the pistol into the correct range, the large gun which it controls is also brought into range. Pulling the trigger of the pistol discharges the gun.

The Skipper Ashore.

"Good men to have in charge of any sort of work that involves the handling of men, and especially good for such work that is also more or less outdoors, as for instance the superintendence of piers and the care of work on any sort of boats, and work in and about warehouses, and that sort of thing," said a steamshipman. "Are retired captains and mates of vessels.

"They have to be good and able men to get up to places such as they have held on the sea, and the qualities that have made them successful afloat are equally valuable in any work they may be called upon to do, and especially in such work as I have indicated ashore.

"They are accustomed to command, for one thing; they can make men work and keep them going; they can get things done. They are likely to be able to pick out the right sort of men for bosses, if they have control of many men, and they know how to handle things and how to stow things to the best advantage.

"They are all the time watchful and alert, as they have all their lives been accustomed to be at sea, of necessity. Instinctively or by observation they know the weather in advance and always take due precautions regarding it; they never get caught napping.

"Accustomed to taking no chance, but to having men on watch night and day at sea, they set watches just the same on land, and fire, that special terror to men on ship, they guard against and look out for here with the same care that they would afloat.

"You see, the man in command of a vessel lives in a world of his own, where everything depends on him, and where he must look out for everything, and so he develops constant watchfulness and resourcefulness in emergency and readiness in action; he must be in the nature of things an able man, and that's why the sea captain or mate, retired perhaps for some disability that may impair his usefulness at sea, may make in the right place an especially good man ashore."

Metallizing Wood in France.

An interesting method of applying a preservative to railway sleepers and timber is described in L'Industrie Electrique de Paris. The process consists of the artificial metallization of the pores of the wood, the metal being deposited electrically. In brief, the method requires, first, the application of a solution of some salt—sulphate of copper, for example—by placing the wood immersed in the solution in a closed chamber and subjecting it to pressure. The wood is thus thoroughly impregnated with the solution. It is then taken out, and piled up in layers in a concrete reservoir. The first layer of timber is immersed in the same copper sulphate solution, and also rests on a layer of jute or other fibrous material, which is supported by an electrode made of woven strands of copper. Similar electrodes are placed between each layer of timber as they are piled up to the desired height. Alternate electrodes are then connected to the opposite poles of an alternating current supply, and the current is allowed to pass. The action is said to decompose the solution and set free metallic copper in the pores of the wood. Besides the preservative action in thus closing the pores, it is said that a certain amount of copper sulphate is permanently retained in the pores, giving an additional and a decided preservative effect.

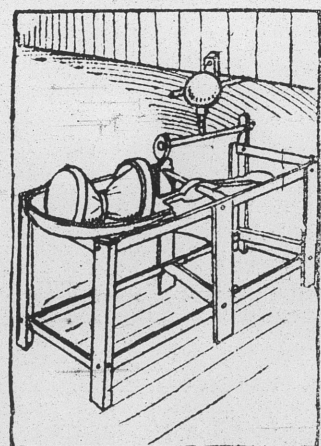
BIRDS WITH COLORED HEADS.

Curious Mistake in Classification Caused by Pollen.

Many birds frequenting flowers for honey or insects are thus liable to get their heads covered with pollen, says the London Globe. And since the pollen of different flowers varies in color a bird may become yellow-headed, red-headed, blue-headed, etc. This led to a curious mistake in the case of a New Zealand bird. This bird was a honey-sucker and a haunter of flowers. Now, in the early summer it visited most frequently the flowers of the native flax, and later in the year fed chiefly on the fuchsia. The pollen of the former is red, and of the latter blue. Hence in the early summer the bird appeared with a red head, and was named the red-headed honey-seeker. But when later in the year it went to the fuchsia its head was stained blue, and it was called the blue-headed honey-seeker. Thus, for a long time this bird was thought to be two distinct species, and only recently was it found that the red-headed and blue-headed were one and the same, and that the real color of the head was blackish brown.

For Delivering Mail.

Devices whereby express trains collect bags of mail at stations on the road without stopping have been in use extensively for a number of years. Naturally, these first used were not entirely satisfactory, and inventors have been endeavoring to improve upon them. Many of the devices patented, although successful in every way, have been so complicated in construction that their use became impracticable. This can't be said of the one shown in the illustration, which comprises a supporting frame in the center of which



Weight Operates Shovel.

is pivoted the shooting mechanism. The latter consists of a shovel having at one end a large bowl in which is placed the mail bag. On the end of the frame opposite the mail bag is a pivoted weight. This weight is very heavy and is released by a projection on the passing train. As the weight descends it strikes the handle of the shovel with great force, swinging near the ground the mail bag continues on its journey through the air, entering the open door of the mail car as it passes the station.

Mirrors That Flatter.

"It is not enough to make true mirrors," the dealer said. "If that were all, ours would indeed be a simple business.

"Dressmakers and milliners require mirrors of all sorts. They need, for example, a mirror that makes one look taller and thinner. When they dress a fat, short patron in one of their new hats or suits they lead her to the mirror, and she is so surprised and pleased with the change for the better in her looks that she straight off she buys.

"For maids I make a mirror that, like a retouched photograph, hides blemishes, wrinkles, scars. The masseur takes the wrinkled face of some rich old woman, steams it, thumps it, pinches it, and smacks it for an hour, and then holds up to it the mirror that gives a blurred, bluish-hiding reflection. The woman thinks her wrinkles are gone, and is happy till she gets home to her own true mirror.

"Altogether I make some twenty varieties of false mirrors. Salesman and saleswoman in millinery and dressmaking establishments can double and quadruple their business if they are quick and deft in their selection of the mirror that flatters each patron best."

Etiquette in London Clubland.

In some of our ultra exclusive clubs it is a serious breach of etiquette for one member to speak to another without obtaining a ceremonious introduction beforehand, says the London Chronicle.

A painful case has just occurred in a certain old established and extremely respectable Pall Mall cavern. It appears that a newly joined member, in callous defiance of custom, ventured the other afternoon to make a remark about the weather to a gentleman with whom he was not personally acquainted. The recipient of this outrage glared stonily at its perpetrator.

"Did you presume to address me, sir?" he demanded, with an awful frown.

"Yes, I did," was the defiant reply. "I said it was a fine day." The other digested the observation thoughtfully.

Then, after an impressive pause, he turned to its bold exponent. "Well, pray don't let it occur again," he remarked, as he buried himself once more in his paper.

OUR BOYS AND GIRLS

TARDY TOMMY

Tommy Brown was always late to school. He was such a heedless boy that he usually forgot the time and played along the way. Nothing could cure him of this bad habit. Even when his teacher kept him in from ball game, in which he was eager, to make him write a thousand lines, "Remember this, be punctual as a sun, though others lag," he was late the very next morning.

One dreadful day, when he was a whole hour late, Miss Amy sent him into the girls' room to stand on a stool for two hours and wear a card printed in big red letters: "Tardy Tommy."

After that Tommy thought he never would be late again. But he soon forgot.

At last his mother thought she would teach him a lesson.

"Tommy," she said one day, "would you like to give the boys a sailing picnic to Idlewild on Saturday?"

"Would I?" cried Tommy. "Well, I guess! May I ask the whole push, mother?"

"Oh, Tommy, dear, why are you so slangy? Yes, ask all the boys. Let me see, there are twelve of you, are there not? Give me the list and I will telephone to their mothers."

Saturday was clear and cool, and Tommy was at the wharf bright and early. Not a boy was there. Nine o'clock came. Still not a boy was to be seen.

"Mother," said Tommy, "where do you think those fellows are? They're as mean as mud to be late at my party."

"Oh, well, Tommy, they are only a little late, and that does not count, you know."

Tommy looked rather queer, for that was his own daily excuse.

By a quarter past nine Sammy Bangs came; at half past, Jack and Ted Thompson; still later the three Masoner boys. At half past ten only seven of the party of twelve were on hand.

How those waiting boys did fuss and fume. The breeze was fine for sailing, but Mrs. Brown said it would be impossible to start without all the guests.

Every little while Tommy growled, "Those are just the rudest fellows; catch me asking them to a sail again!"

"Oh, surely not rude, Tommy; only a little late, you know," Mrs. Brown would reply.

"All aboard, boys," called the skipper. "If you want a run to Idle-



Tommy stood before the school. wild to-day, we must be off, as I've another party at 11."

"Please, mother, can't we go without Will Briggs? He's just horrid to be so late."

"Late! Why surely that's nothing, Tommy," replied Mrs. Brown.

Just as the captain called "Too late for a sail to-day, boys," Will was seen running down the hill. The disappointment was terrible, but there was nothing for the party to do but go home, after a whole morning's wait on the wharf.

How did it happen? Mrs. Brown, who had arranged with the mothers of the boy to have each come at a different hour, might have told.

But Tommy had had his lesson. He learned that being late did count. After that Saturday he was on time at school every day for the rest of the year.

When he had become very punctual, his mother let him give another sailing party "for the push." That Saturday every boy was on the dock promptly at a quarter before nine. What a glorious time they had sailing and crabbing, and such a good lunch at Idlewild.

Willie's Lion Hunting. "When I grow up," said Willie, "I am going to Africa and kill lions with a spear."

"Why not kill them with a gun, Willie?" asked his father.

"Why, all the natives kill lions with a spear, you know, and I wouldn't want to have the advantage of them. I would want to fight the lions hand to hand."

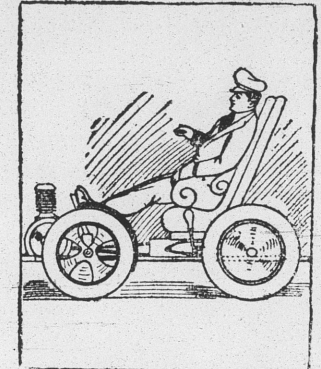
"But suppose you ran upon two lions," said Willie's father. "While you were fighting one hand to hand, the other could slip up behind and bite a piece out of the back of your neck."

That put the matter in a new light. Willie thought over it a while and then decided perhaps after all it was better to be a pirate.

PECULIAR MOTOR CAR.

Built for One Passenger Only and Steered by Foot.

The illustration below shows a new type of motor car that should in the near future have many supporters. It is a foreign invention, and on account of its peculiar construction attracts attention immediately. In size it is about as small as a motor car can be made, there being seating capacity for only one passenger. There is also a total absence of complicated steering apparatus. The operating motor is placed imme-



diately in front of the rider. One lever is sufficient to regulate the speed and is placed in close proximity to the seat. Probably the most peculiar feature is the method of steering. This is done by means of the feet, very much like a young boy would steer his express wagon. The hands are at all times free, the rider being able to enjoy a smoke with pleasure. Other peculiar features are the size of the wheels and the height of the frame above the ground.

When the Kaiser Travels.

Even when travelling the Kaiser is at work, for being the chief of a great nation he must keep the Government machine in motion, says the Review of Reviews.

A large staff of Government officials accompanies him. A high official from the Foreign Office attends to the duties of foreign politics, makes reports on the affairs of state, receives the orders of the sovereign and keeps up the communication between the Kaiser and the Chancellor. Then there is a deputy councillor who takes dictations, decipheres telegrams and transmits the same. Besides, two adjutants accompany the suite.

For the very lively exchange of messages between the Kaiser and the Chancellor special arrangement is made by the Imperial postal department. Telegraphic messages must be presented at once to the Kaiser. When necessary to be deciphered a postal official is in the nearest telegraph office to attend to this duty.

When the Kaiser is out hunting a special messenger goes after him in case urgent messages must be delivered. Even at a late hour in the night the Kaiser has ordered that regardless of his own convenience he shall be awakened if important communications arrive. In addition to these telegraphic reports, mail matter, which arrives daily by courier, must be answered; then, also, attention must be given to the reports of Ministers from other departments, conferences must be held at all times of the day, and long dictations given in the study where the Kaiser is stopping, he is on board of the Hohenzollern or in his steeper.

Added to this must be reckoned the hours when he is working alone, consisting of the reading of newspaper clippings, the active correspondence with his wife, from whom he receives a daily letter, and the correspondence with royalties or friends.

Hunt for a Hangman.

The British army was once in difficulties through the lack of a hangman. Murder was committed by a soldier in the Crimea, but nobody could be found to carry out the sentence of the court-martial.

It was announced that £20 and a free discharge would be granted to the man undertaking the task. At last a man did volunteer. He was a newcomer to the army.

On the night prior to the date fixed for the execution they locked up the hangman in a stable to keep him safe. In the morning the party at the gallows waited, but there was no hangman. He had gone mad during the night, or else he was now simulating madness.

The officer in command turned to one of his Captains with: "Captain, you will have the goodness to hang the prisoner!" The Captain changed countenance, but he pulled himself together, and appealed to the sergeant with: "Which of you will hang this man?"

And to spare his Captain, one of the men volunteered. He afterward had the satisfaction of flogging the man who had volunteered and failed.

Protective Colors of Animals.

I seem to trace a faint clue to the connection between the protective coloring and the mind in the intense desire of the fox to remain concealed and unseen. That this is a possible theory we infer from the fact that a blind animal does not change color. Put a dozen minnows into an ordinary white wash hand basin and they will in a very short time be of a pale color. If over one no change passes we may be tolerably certain that it is blind.—Dale's "The Fox."

THE WAY OF THE TRAIL

Brucie Annie Dunne.

The full moon rose over the wide desert, turning the chaparral into tawny beauty.

The man got to his feet unsteadily, with a look of fear in his eyes. His glance stared across the grim level, down the faint, white line of the trail, then back, to fall upon the face of his companion, and the look deepened.

Sleeping? He knelt feebly, again placing his hand upon the face of his companion and the look deepened.

As he did so the always smouldering wrath of his soul toward that other man—miles ahead now—that man who had robbed them, swelled to its height. He had always mistrusted him, but his hate had never assumed strength as this. He became conscious, as he had never been before, that that man was responsible for it all, the strayed pony, leaking water bottle, and to the crowing horror and certainty of his—and his brother's—death.

His distorted brain wrought upon the knowledge that plainsman owned of the desert, knew it as well as his own name, had told him so—knew the secret spot of his and his brother's mine of golden ore back there in the far-away hills. He had left them to slow death, to claim it; taking that only remaining horse, the last drop of water.

"But we'll live, and we'll get better of him yet," he muttered to the unheeding form.

A long time he sat there, motionless as the unconscious man in his arms, staring down upon the hypnotic calm of the blank features, forming an anathema in his heart.

As he watched the stiff caked lips began to move, and disjointed words, whispers, half-formed sentences fell from them, peopling the penetrating silence with fearsome sounds.

"Jim—tell her to—wait for—me. We're rich!—gold—yellow gold! Tell her to wait—she promised—gold—yellow gold!"

Then silence, a rhythmic pause, and the beat of the words again.

A groan choked past the lump in the throat of the man listening, and by and by his fevered eyes lifted in a prayer, slowly, up to the drowning deeps.

"Save him, oh, God!—not me. Save him!"

Over and over these words fell, half unconsciously, while he wiped the damp forehead as gently as a woman would.

Releasing his left arm cautiously he laid his burden back on the outspread coat and stumbled over to the dead horse. With fumbling hands he removed the saddle blanket and dragged it across the few rows to the sick man's side, where, around his head and shoulders, by the aid of this and a chaparral bush, he built a sort of screen to shield the staring eyes from the light of the moon.

This done his gaunt figure swayed a bit as he stood for a moment and looked down at the helpless, whispering wreck of him who had once been bigger and stronger than he, then with a muttered word he turned his steps forward to the dim, white trail, tangle and twisting its tortuous way, faint and fainter, on to the point of disappearing uncertainty.

All night the dragging feet shuffled doggedly, making little headway, stopping every now and then at short and shorter intervals, to start again with a flickering spurt of strength as the thickening sense of necessity urged, pursued by the thought of the form under the chaparral bush, back there—somewhere.

But when the silver-yellow light flooded the east the lone figure ceased to stumble and hitch along; it sank down on the crest of a sand dune and sat bowed over its knees.

The sun came over the desert, full and red, and flamed into the face of the man, who stared and nodded. The man shivered, too, for the fever had communicated itself to him and had full control, while the grip of its haze settled upon him.

Higher rose the sun, beginning at once its shimmering dance over the arid waste. It danced in giddy circles, maddening waves, chasing each other, deep into the cavernous eyes that stared into vacancy; and by and by wrought in them the cowed, helpless appeal of a dog's under the lash of his master. He moved his head to and fro, and closed them, blinking. They opened again, shut, opened and fixed upon a dark spot directly in the path of the grinning sun.

It grew large and distorted, that spot, to the eyes watching; which opened wider, staringly, flashed and steadied, and a great cry rose to the man's lips—choked—soundless; with a sudden spasm, wild and glad, swept his face, and he dropped weakly to his knees.

"Jim—it's Jim! He never meant—to desert—us. He—Jim—" With this strained, thickened whisper on his lips he fell face downward in the sand.

For a moment he stirred there, then lay quite still, the egd light on his face; just as the two men in the prairie team drew up, and one swung down from the creaking seat, a brimming water gourd in his hand.

Regulating Railroad Rates. The Legislature of Washington at its latest session passed a law making the maximum railroad fare for adults 3 cents a mile and for children 1 1/2 cents.

One Greenland whale weighs as much as 38 elephants or 440 bears.

Heart Strength

Heart Strength, or Heart Weakness, means Nerve Strength, or Nerve Weakness—nothing more. Positively, not one weak heart in a hundred is, in itself, actually diseased. It is almost always a hidden tiny little nerve that really is all at fault. This obscure nerve—the Cardiac, or Heart Nerve—simply awnds, and must have, more power, more stability, more controlling, more governing strength. Without that the Heart must continue to fail, and the stomach and kidneys also have these same controlling nerves.

This clearly explains why, as a medicine, Dr. Shoop's Restorative has in the past done so much for weak and ailing Hearts. Dr. Shoop first sought the cause of all this painful, palpitating, suffocating heart distress. Dr. Shoop's Restorative—this popular prescription—is alone directed to these weak and wasting nerve centers. It builds; it strengthens; it offers real, genuine heart help. If you would have strong Hearts, strong digestion, strengthen these nerves—re-establish them as needed, with

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GIVES QUICK RELIEF
Applied externally it affords almost instant relief from pain, while permanent results are being effected by taking it internally, purifying the blood, dissolving the poisonous substance and removing it from the system.

DR. S. D. BLAND
Of Brewton, Ga., writes: "I had been a sufferer for a number of years with Lumbago and Sciatica in my arms and legs, and tried all the remedies that could be gathered from medical works, and also consulted with a number of the best physicians, but found nothing that gave the relief obtained from 'DROPS.' I shall prescribe it in my practice for rheumatism and kindred diseases."

DR. C. L. GATES
Hancock, Minn., writes: "A little girl here had such a weak back caused by Rheumatism and Kidney Trouble that she could not stand on her feet. The moment they put her down on the 'DROPS' she was free from pain. I treated her with 'DROPS' and today she runs around as well and happy as can be. I prescribe 'DROPS' for my patients and use it in my practice."

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