DESTROYER A MARVEL Forty-three Miles an Hour is the Record

Interesting Vessel. For several years past the record for aquatic speed has been the subject of keen competition between the builders of pleasure or passenger carrying craft and the constructors of the lighter class of naval vessels. But the naval vessel has been placed far in the lead for the present in the race for speed supremacy by the success of the torpedo boat destroyer Viper of the British navy. When she reher first trial last autumn was very general disappointamong those who hoped for great results from the adoption of the turbine principle in engine building that she was able to make only 82 After a thorough overhauling during the winter and the remedying of certain minor defects the inwentor, the Hon. Charles A. Parsons, is nearly 12,000. When one reflects announced that he was ready for another trial. This trial took place recently under the direction of officers steam, it will be seen that in the matof the British Admiralty.

37 knots, or practically a rate of 43 over other ships. Another factor miles an hour.

the fastest of her kind in existence, a third less than that of other dewith the possible exception of her stroyers of her dimensions. She has ester ship the Cobra, which has been twice the horse-power of these 30built on about the same lines and is knot boats to drive less body weight. of nearly the same size as the Viper. It is more than a possibility that in

which was the very first, was intended by Mr. Parsons to be merely a practical demonstration of the soundness and practical utility of his plans.

THE VIPER does not differ materially in external appearance from others of her kind Her freeboard is low. and her lines are the lines of a fast Her short, wide funnels suggest a tremendous draught across the fire grates. She has a turtle back protective deck forward, where the wash of the waves will come when she strikes a 40-mile gait.

Her length is 210 feet, her beam 20 feet and her draught between five and six feet-the latter an evidence of the 325 tons.

is very different from the ordinary than can be done in the case of steam vessel.

ed from the vertical movement of the time. piston head to the revolving move-

ment of the shafts. By this method of applying the power the piston changes its direction with every revolution of the machin- rena. ery it drives, and this continual Oh. I see; you're fixing to get a good change of direction with every stroke long nap. of the engine causes the vibration which is always present in this method of driving machinery.

In the turbine engine the steam is applied directly to the shafts which it drives. There are no cylinders and no pistons. The only gear used is carried by the shaft itself and by the chest which incloses it.

This gear consists simply of hun- any better? dreds of small steel blades projecting fixed at such an angle that the stairs. steam as it enters the chest exerts its power against them and turns the Similar blades are fixed to the inner walls of the chest in a stationary position. These are interposed between the rows of

REVOLVING BLADES,

and skant in the opposite direction in order to turn the full force of the steam directly upon the latter. The passing through the chest, strikes the face of the hundreds of little blades and turns the shaft. The action is the same as that of water in driving a turbine water The device seems simplicity itself, although it has taken 15 years of experimental work on the part of Mr. Parsons to bring about its succeasful application to steam propulsion.

only limit of speed is the of steam power that can be The Turbinia's screws were 2500 revolutions per minute, which is 10 times the rate attained in vessels of the ordinary type.

Another advantage of the turbine system is that it utilizes practically whole power of the steam. the steam travels away from the boilers it constantly expands, of course, and therefore exerts less pressure to the square inch. But by inereasing the size of a shaft's collar and of the blades which it carries the same number of revolutions per

minute may be obtained from steam of a lower pressure.

From the Viper's boilers the steam passes to two high-pressure turbine motors, which drive the two outer propelling shafts. From there it is conducted to two low pressure and of H. M. S. Viper-Description of this two reversing turbine motors driving the inner shafts. These propellers do not project beyond the stern the others. The Viper has boilers one-fifth larger than those of the ordinary torpedo boat destroyer cf her size. There are nearly 2,000 feet of additional heating area.

HER HORSE-POWER

that by using turbines 20 per cent. increased efficiency is obtained from the ter of available steam power the They report that the new boat made Viper possesses an immense advantage which adds to this advantage is her There is no doubt that the Viper is extreme lightness. Her tonnage is

The latter is the first vessel of any doing 37 knots the Viper did not reach practical importance to be built on the the top notch of her speed capacity. turbine principle. The Turbinia The Admiralty officers under whose direction the run was made, naturally were not anxious to push her beyond the point at which she became a Accepting demonstrated success. these figures, however, the difference of 10 miles an hour-which is practically the difference between the Viper and the fastest commissioned destroyers of the British and other navies-is a sufficient gap to cause general adoption of this style of architecture in the building of torpedo boat destroyers, in case the Viper proves a success in all other respects. Of course, the only way to reverse

any ship is to set her propellers to revolving in a backward direction. On the Viper this can be done, to all inextreme lightness of her working tents and purposes, instantly, and the machinery. Her displacement is only fact that she carries four screws to each propeller enables her to overcome In interior arrangement, the Viper the forward impetus more quickly vessel of her class. Her boilers are vessel with single screw propellers. much larger, her engines and shaft- Therefore, the Viper can come to a ing much smaller and the whole work- stop as quickly as an ordinary vesing mechanism of the boat seems sel, in spite of her greater forward more simple than that of the ordinary speed, and she can run backward at a rate estimated by Mr. Parsons at In ordinary engines of the recipro- 16 knots per hour, or rather less than cycle consists of cating type such as are used generally half-speed. In her trial she was able in steamships the steam passes from to come up to expectations in the mat- This cycle is very ancient and probthe boilers through cylinders of high ter of reversed speed. But it was and low pressure and thence is ap- found that when running backward plied to the shafts which drive the she was unsteerable. This, however, vessel by means of pistons. In ap- is a difficulty which her builder explying the power the motion is chang- pects to remedy within a very short

A USEFUL SONG.

What shall I sing, Clarence? Sing that lovely old-time song, Lo-

REGRET.

A country paper has this personal item: Those who know old Mr. Wilson of this place personally will regret to hear that he was assaulted in a brutal manner last week, but was not killed.

GETS SOME RELIFE.

Doesn't your husband's insomnia get

No; the only sleep he ever gets is from the shaft inside the chest, and when I think I hear a burglar down.

WHAT HE GOT.

Pardon me, said the suitor as he picked himself up at the bottom of the front steps, but there seems to have been a misunderstanding somewhere. I asked for your daughter's hand, and I have received your foot.

of Dodd's Kidney Pills are legion. The box is imitated. the outside coating and shape of the pills are imitated and the name-Dodd's Kidney Pills is imitated. Imitations are dangerous. The original is safe. Dodd's Kidney Pills have a reputation. Imitators have none or they wouldn't imitate. So they trade on the reputation of Dodd's Kidney Pills. Do not be deceived. There is only one DODD'S. Dodd's is the original. Dodd's is the name to be care-

ful about-

KIDNEY

THE CHINESE CALENDAR.

Possible Reason Why the Dates in Cable Despatches Are Sometimes Confusing. The sojourner in the Far East is sometimes driven to wonder why the Chinese have a calendar at all. They view the passing of time with superb indifference. punctuality, if such a thing were ever to enter into the Celof the vessel. They leave the engine estial calculation, would be regarded room at a slight downward angle, as undignified. Nevertheless they have which carries them further below the a calendar which is by no means a surface than would be possible if bad one when one considers its imthey extended directly astern, and mense antiquity. A wise monarch gives them a grip of the water which named Yao some time about 2300 B.C. the light draught of the vessel would revised the calendar in use before that otherwise prevent. The forward date to the form in which it is found screws are some 30 feet ahead of the at present. A volume would be needstern. By thus separating the screws | ed to explain all its peculiarities, but each set has its own water to work now that despatches are mentioning in and is undisturbed by the action of Chinese dates it is well to have some idea as to wherein the Celestial calendar differs from the Gregorian.

> THE CHINESE YEAR is lunar, and therefore consists of 435 days. Before the time of Yao tradition has it that the year consisted of 360 days, and that confusion had resulted. That ruler decreed that time should be measured by the moon and that every nineteen years should contain seven additional months-almost one extra month every three years. This reckoning is excellent; it varies only about an hour every nineteen years from the true time.

Although the year is lunar, its beginning is regulated by the sun. Thus the new year comes between January 2 and February 6, unlike the Mohameten new year, which is regulated entirely by the moon, and comes at any time, winter or summer. The year is divided into twelve lunar months, called by numbers, as first, second and so on. The extra month that comes about every three years is not added at the end, as one would suppose, but is inserted anywhere, probably according to some system too subtle for Western minds. The months are subdivided into three parts, which are not again subdivided, so that a Chinaman may speak of an event without mentioning the exact time within ten days. The days are also numbered, so that exactness may be secured if a Chinaman should ever happen to want such a thing. There is no week, but foreigners are gradually teaching the meaning of such a division. The Chinese hour is 120 minutes long, but in this instance again the foreigner is making some impression on the ancient custom, and the Chinese in and near the treaty ports are familiar with the Western method. It may be added, incidentally, that Pekin is just about twelve hours ahead of New York in

point of time, The Chinese gather the years together into cycles, as Occidentals do. but for some extraordinary reason the

SIXTY YEARS.

ably has something to do with old astrological superstitions. Another method of numbering years is by the reigns of the Emperors. The present year is the thirty-sixth year of the seventy-sixth cycle, or the year 4536 since the adoption of the present chronology.

Each year has a separate name, formed by some combination of ten the loot. characters, joined twelve "branch" characters. These impossible to the Oriental and the complicated system of naming the years is proof of Chinese ingenuity.

Of late years it has been supposed that the Chaldeans and Chinese had some intercourse at the time when Yao reformed the calendar, and that the two countries worked together in making the change. Certain it is that a similar event, occurred in Chaldea about the same time. But whenever the calendar was adopted it is likely for a long time to withstand the march of progress. It is correct enough, and the inconvenience does not worry the Chinaman in the least.

FLASHES OF FUN.

We've cured that clerk who was always in debt to all of us, How did you do it? Why, the minute he gets paid we all borrow, of him.

This morning I reminded Jones that he owed me sixty-five cents. vex him? Oh, no; it reminded him to remind me that I owed him \$2.

Paying the Freight .- Johnny-Paw. when a man expresses an opinion, can he collect express charges on it? Paw-He can - if he is a lawyer.

Your family is, late getting off for your summer trip. Yes; there are so many of us to make up our minds where to go that we never get started until fall.

Papa, said Benny Beechwood, what is the highest position in the army? The command of the balloon brigade, replied Mr. Beechwood promptly.

Invalid, to sympathizing caller, -My dear, I have lost nearly all my hair. Literal Child-I know where yards of him." it is, mamma; I saw it in your dress- HOW BULLER HEARD OF MAJUBA. ing-table drawer.

SOMETHING QUITE NEW_

CEYLON GREEN TEA

Sama flavor as Japan, only more delicious.

HE HAS FOUGHT FOR THE EMPIRE ALL OVER THE WORLD.

He Smelled Fire First at the Capture of the Taku Forts-His Experience in the Red River Rebellion.

General Buller ought to be able to fight. He has fought in China, Canada, and in Africa, north, south, east and west. Chinese, Indians, half-breeds, Ashantis, Kaffirs, Zulus, and Boers have all had their share in making Buller a soldier, says the London Daily Mail.

He comes from the land of whipped cream, and has spent most of his time in whipping those who were black. He began forty-two years ago, when he joined the King's Royal Rifles as ensign in India, just when the Indian Mutiny was at an end. But, unlike Lord Roberts, Buller has never seen fighting in India. For a few months after he became a soldier, his regimen was ordered to China to pull the Celestial's pigtails.

Buller first smelt fire in this war when the Taku forts were captured. This secured him the Chinese meda with two clasps.

Being in Canada on garrison duty, Buller's regiment came in for the Red River expedition, which was under Colonel Garnet Wolseley's control. The North-west Provinces, had been added to Canada, but the French halfbreeds, under Louis Riel, became unruly, took one of the Hudson Bay Company's forts, and made some English prisoners.

In this bloodless expedition Buller count necessarily hereditary. got a great deal of experience, which served him to good purpose in our the purpose. This occupied four had collapsed. In this campaign Buller was a captain, and did splendid service in directing the transport.

A VISIT TO KING COFFEE. Having seen service in the land of tea, it seemed poetic justice that Buller should pay a visit to King Coffee. This monarch of Ashanti had also made Englishmen prisoners, and again General Wolseley was sent out to point out the error of so doing, and with him Captain Redvers Buller, 1873, as deputy-assistant-quartermaster. In addition, he was made head

of the Intelligence Department, and upon his information the campaign was planned. In this campaign Buller got two things-a bullet in his compass-case and the fever. The first he kept; the second he overcame, and was able to proceed to Kumasi and to the capture of King Coffee, and got a C.B. as the

In 1873 Major Buller went to Natal, where now, twenty-two years after, he could be described only by a lengthy command of the Frontier Light Horse mind. To go straight to anything is In three months Buller's Horse had great effect, and the Kaffir rising was put down. Then Buller was ordered to the north end of Natal to pacify the Zulus, and from this campaign he emerged with the Victoria Cross upon his breast, the sign to all that its

wearer was a brave man.

BULLER'S 100 HOURS IN SADDLE. The unrest of the Zulu king, Ceteumns, terrible disaster occurred at Is- no automobiles in them days. mishes and hot contests, and in all a week's board in advance. of them Buller showed himself a bold leader of men.

men had skirmished once, fought twice, and marched 170 miles, Buller did that which gained him the V.C., and occasioned the following to appear in the London Gazette:-

" For his gallant conduct at the retreat at Mhlobane, on March 28, 1879, in having assisted while hotly pursued by Zulus in rescuing Captain C. D'Arcy, of the Frontier Light Horse, who was retiring on foot, Colonel Buller carrying him on his horse until he overtook the rearguard; also for havcircumstances, conveyed to a place of safety Lieutenant C. Everitt, of the ing on the same day, and in the same was completely exhausted, and who Frontier Light Horse, whose horse otherwise would have been killed by the Zulus, who were within eighty

It was in this war that the Prince

Imperial was killed. Buller was one of the first to hear the bad news, from one of the officers who was with the Prince. The battle of Ulundi ended the Zulu war, and both Lord Chelmsford and Sir Garnet Wolseley in war

made Colonel and A.D.C. to the Queen, but two years more saw him back in South Africa again. The Transvaal trouble was brewing. Majuba Hill was in sight, and all the long series of events of which we have lately heard so much. Buller was in Cape Town when the news of Majuba Hill and Colley's death came to hand, and he was for instant action. But peace was signed and Buller was made Chief of the Staff to Sir Evelyn Wood in Natal.

The question of heredity, or the transmission of certain mental traits or physical characteristics from parents to children, is one that has been much studied, but of which as yet too little is known. Formerly the inheritance of disease was believed in implicitly, by physicians as well as laymen, and the list of maladies to which children were supposed to be almost inevitably condemned by the accident of birth was a very long

Among these hereditary diseases reckoned consumption and scrofula, leprosy, gout, rheumatism, gottre, camcer, insanity, epilepsy and many other nervous affections.

dies, however, one after another of them is removed wholly or in part from this category and placed among the acquired diseases,

ly inherited, but their number is certainly not large. Many diseases run in families, but are not on that ac-

recently regarded as one of the most Soudan troubles. One thousand two surely inherited diseases, and is still hundred men had to be conveyed 1,200 believed by many to be so. But we miles, and boats were necessary for now know that it is a germ disease which, while not "catching" in the weeks. But on arriving at their desti- ordinary sense of the word, is readily nation it was found that the rebellion | transmitted from the sick to the well when the invalid is careless in his habits, especially as regards expectoration. It is also acquired more readily by those of delicate constitution than by the robust.

have broken his finest meerschaum The children of consumptive parents are seldom robust, and so are predis- pipe? posed to any of the germ diseases. and living constantly in a house where the germs of consumption are necessarily abundant, they are very likely to become victims of that disease.

This is an important fact. is used, are very great.

The bringing up of a child in result, to say nothing of a share of sunlight, not too much study, long are used in an ingenious way that is so busy. On his first visit he took family malady—these are the weapons article, and would probably then be with the object of introducing them to herited weakness of constitution may by which the malign influence of innot quite intelligible to the Western the Kaffirs, who were giving trouble. be overcome and many precious lives

Sunday school teacher-Woe! Woe cried the prophet Jeremiah, and wayo, led to the invasion of his coun- again Woe! Woe! Now, children, try by Lord Chelmsford, who had why did he say that? Bright Boy-I Buller with him. To one of the col- guess it was 'cause they didn't have

andhlwana, and, inspired by this, Bul- I believe you boarded with your

The View-Point-First Rabbit That town boy has been around here At last, after one hundred consecu- nearly a week and never once tried tive hours in the saddle, in which his to kill us. Second Rabbit-Yes; he face s of the system. Price, 75c. per bottle Sold by all drugg sts. Testimenials free. Hall's Family Pills are the best. seems to be devoid of all human attri-

Is she what you would call a summer girl? O, dear, no. Why, she hasn't learned how to lie in a hammock gracefully yet, and you know that's the first requisite.

He knew his wife was true as stee And constant-idem semper-But often he was made to feel

despatches gave high praise to Bul-

ler's share in it. .

Then Buller returned home, and was

INHERITED DISEASES.

Many Supposed Hereditary Maladies Are Really Acquired.

As we learn more about these mala-

Undoubtedly some diseases are real-

Consumption, for example, was only

teaches us that since, as a rule, only the predisposition to the family disease is inherited, and not the disease itself, the chances of the younger generation escaping, if proper care

consumptive family should be of a that? specially hygienic character. The best of food, floods of fresh air and er than stayin' on the farm and feedhours of sleep in a well ventilated room and, as far as possible, avoidance in' city relations. used by mothers for their children teething. It soothes the child, softens the gums, allays pain, cures wind colic, and is the best remedy for diarrhoea. 25c.a bottle. Bold by all druggists throughout the world. Be sure and ask for "Mrs. Winslow's Soothing Syrup."

School Teacher-What little boy can he has to take the consequences. tell me where is the home of the swal- Drugs too. low? Bobby-I kin, please. School Teacher-Well, Bobby Bobby-The home of the swallow is in the stum-

name in them, and you'll lose them fast enough.

ler made a vigorous attack upon the wife's mother, before the happy event. Zulus with 106 of his own horse and Did you have any trouble in convincthirty-three Boers. This Zulu cam- ing her that you were the right man paign was a long series of brisk skir- for a son-in-law? Not after I paid her

That she, like steel, had temper.

HIS INTENTIONS.

EVENTS MAY COME AND GO, but the high standard of quality will

DR. HAMMOND-HALL'S

English Teething Syrup

Comforts Crying Children.

LARGEST SALE

LONDON. NEW YORK. TORONTO.

OMITTED THE ATTIC.

I am a self-made man, said the

your head, commented the other part

The part you talk with is out of

proportion to the part you think with.

THE DIVIDING LINE.

BETTER THAN MARRIAGE.

No; but I'm engaged, and that's as

It's better, if you only knew it.

As if by Magic.

This is always the case when Nervi-

line is applied to any kind of pain;

it is sure to disappear as if by magic.

Stronger, more penetrating, and

quicker in action than any other

remedy in the world, pain cannot

stay where it is used. It is just the

thing to have in the house to meet a

THOUGHT SHE DID.

my husband will say when he finds you

Maid crossing herself-I do, mom!

THE REBELLION

In the North-west has been suppress-

reasonable attention to their corns.

The only sure, safe, and painless rem-

edv is Putnam's Painless Corn Ex-

sore spots worse than the original

discomfort. See that you get "Put-

ECONOMICAL PLEASURING.

City Cousin-I see the farm-house

Rural Relative-Mrs. Hayfork, who

lives there, has gone to the sea-side

for the summer. She' says it's cheap-

FOR OVER FIFTY YEARS

When a man eats green cucumbers

MONTREAL HOTEL DIRECTORY

The "Balmeral," Free Bus Am. Plan

I'm accumulating too many books

How's This?

perfectly honorable in all business transact-

ions, and financially able to carry out any obligation madeby their firm.

WEST & TRUAX, Wholesale Druggists, Toledo,

O. 4 WALDING, KINNAN & MARVIN, Wholesale Druggists, Toledo, O.

Hall's Catarrh Cure is taken internally, acting directly upon the blood and success sur-

next to this one is closed. Why is

nam's." and take none other.

and our citizens can now devote

It never fails; never makes

Mistress-Bridget, do you know what

know when you had enough?

Married yet, old man?

sudden attack of illness.

proud individual.

How's that?

have too much.

good as married.

of the conversation.

THE WORLD.

BRITISH CHEMISTS COMPANY

Papa thinks, she said, shyly, that it is about time you were declaring your Well, you are all right except as to intentions.

Tell the old gentleman, he replied, that I love you too much to marry you.

W P C 1036

CALVERT'S

Carbolic Disinfectants, Soaps, Oins ment, Tooth Powders, etc., have been awarded 100 medals and diplomas for superior Wife-Shame on you! Didn't you excellence. Their regular use prevent infections diseases. Ask your dealer to obtain a supply. Lists mailed free on application. Husband-Yesh! I always have 'nough jush' 'bout two minutesh 'fore I

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Coorgo Cooderham. We offer One Hundred Dollars Reward for any case of Catarrh that cannot be cured by 1st Vice-President and Hall's Catarrh Cure. F. J. CHENEY & CO., Props., Toledo, O. Chairman of Executive We, the undersigned, have known F. J. Cheney for the last 15 years and believe him Herbert Mason. 2nd Vice-President-

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THE SIEGE OF MAFEKING!

EXCURSIONS ON ALL LINES OF PRAVEL For prize lists, entry forms, etc., address Andrew Smith, P.R.O.V.S. H.J. Hill,

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"With the assistance of the natives, I carried Neil into the house, and although much seratched and torn, he was soon on a fair way to recovery. The leopard was found in the morning dead near by, and the old man almost forgot his wounds in contemplating the animal's skin'.'

Blue Ribbon Ceylon Jea Uskyour friends about it