

### Steam Yachting.

It now seems not unlikely that, in the near future, steam-yachting may equal, if not surpass, sail-yachting in favor. Even in a pursuit so leisurely as that of the yachtsman time has a measure of value, and in some aspects it may even be said to be money. Delightful as are the features of sail-yachting, the element of uncertainty which enters into it often becomes a serious drawback. Plans are upset by inability to get to certain places at certain times; and storms, calms, fogs, or adverse winds, may change the entire programme of a cruise. Then, too, a large proportion of our yachtsmen are business men, and as such cannot afford to run the risk of not getting back to their offices and counting-rooms at the time calculated upon. This cannot be done with a boat dependent upon winds and tides. Therefore, for this reason alone, steam is likely to take the place of sail. In Europe steam has to a great extent superseded sail in yachting. In the United States rapid progress is making in the same direction. It appears that in the past season at least fifty steam yachts have been constructed here, and many others are now building. Experience shows that the first cost is certainly in favor of steam, while in the matter of running expenses, repairs, etc., things seem to be about equal. Steam being, from a popular standpoint, a comparatively new feature in yachting, is characterized, as in the case of almost every new departure, by great and rapid advances in the way of improvements in propelling-power, lessening both the first cost and the running expense, securing greater compactness in the machinery, so that comparatively little room has to be sacrificed, and increasing the elements of convenience, comfort, and safety, both in model and motive power. It is in these latter considerations that steam have been particularly lacking in comparison with sailing yachts.—[Outing for January.

### GEMS OF THOUGHT.

The clever turn everything to account. Act well at the moment, and you have performed a good action for all eternity. The most ignorant have knowledge enough to discover the faults of others; the most clear-sighted are blind to their own. The past is disclosed, the future concealed in doubt. And yet human nature is heedless of the past, and fearful of the future—regarding not the science and experience that past ages have unveiled. The finest results can only be obtained when a joyful spirit has animated the worker, when no trouble is deemed too much and no denial too great to accomplish the end in view as quickly as possible. Every man in his own life has follies enough—in the performance of his own duties deficiencies enough—in his fortunes evils enough—without minding other people's business. A truly courageous man may be very much afraid; but he can never act the part of a coward. When the crisis comes, he will nerve himself to action, and prove not that he is fearless, but that fear is his servant, not his master. The sphere of our affections is one in which we are very apt to expect too much from others, and thus to cause bitterness and often estrangement. Where we love we naturally crave to be loved; but this craving, if not regulated by reason, is very apt to blossom into a selfish oppression. On the husband, as being the higher power, lies the chief responsibility for securing domestic happiness. This will not be attained by selfish requirements from others. On the contrary, the husband must use consideration and self-denial, and expend time and money for this purpose.

### SCIENTIFIC GOSSIP.

Mr. Swan has estimated the life of an electric glow lamp at about 5,800 hours. This is a very high average, and the conditions under which it was attained, in the case of the Swan lamp at least, must have been exceptionally favorable. Suberine, the characteristic component of cork, is a true fat, saponifiable by alkalis and oxidizable by nitric acid, which converts it into a mixture of suberic acid and ceric acid. It is composed of the mixed glycerides of phellonic and stearic acids. Vulcanized fibre has been employed for valves for marine condensers. It is said to do much better than india-rubber. Valves of this fibre do not skew or corrugate, withstand well the action of water and oil, and give very little trouble after they have been carefully fitted in place. Aseptol, a new antiseptic, says M. E. Transer, has for its scientific name orthoxyphenyl-sulphurous acid. It is an acid phenol, capable of neutralizing ammoniacal bases. It is said to be preferable to phenol as an antiseptic, because it possesses the decided advantage of not being poisonous. The eider duck does not, Dr. Sundstrom of Stockholm, has ascertained, take her young during the summer into the ocean, as is so generally supposed, but remains with them among the islands on the coast. It appears that the eider duck has greatly increased in the south of Sweden during the last few years. Snails in a state of captivity can, Dr. Rawitz of Berlin, has discovered, be fed on paper. Dr. Kessel confirms this fact by a statement based on his own observations. He says that after feeding snails with highly calcareous paper for some time he found abnormal calcareous deposits in their monstrously developed shells. It is maintained by Herr S. Ralisher that no steps have established the development of electricity during the conversion of water into steam, and that even upon electrified surfaces the steam which arises is electrically neutral. He also states that it can be experimentally demonstrated that no electricity results from the condensation of the vapor of the atmosphere. A first study on the parallax of the sun by M. Bouquet de la Grye has been submitted to the Academy of Sciences, Paris. This paper is founded on the calculations made in Mexico by the author and M. F. Arago during the late transit of Venus. From the measurements then taken there results a mean parallax of 8.76, with an apparent approximations of one-hundredth of a second. Professor Hellriegel has made special researches on the influence of heat and light upon the development of plants. At a constant temperature of 40° C. in the soil the roots of barley cannot develop themselves. A constant temperature of 30° is not destructive, but decidedly injurious. A constant temperature of 20° is best adapted to the wants of the plants, but one of 10° is not distinctly injurious. For the rapid preparation of standard solutions of carbon disulphide, M. A. Livache takes a solution of soap, with which he incorporates a certain quantity of petroleum. In this solution he can dissolve on stirring more than 200 hundred grams of disulphide of carbon per liter for 150 grams of soap. The solution so prepared, after water is added, remains perfectly limpid, the disulphide of carbon not separating out. It must be of importance to dyers to learn that Mr H. Kcechlin has published a new method of fixing chromium oxide, founded on the property of alkaline solutions of chrome of giving up their oxide to organic fibres on being left in contact for some hours. Thus, if cotton is steeped in a mixture of two parts acetate of chrome at 16° (Beaume), two parts caustic soda at 39°, and one part of water and after 12 hours' immersion the cotton is washed, the mordanting is complete.

### How to Dispose of House "Slops."

Country houses are rarely supplied with such conveniences, for removing the house "slops," as are desirable, not to say absolutely essential, from a sanitary point of view. The sink drain from the house pump, if there is one, gets foul and clogged, sometimes several times in a year, and has to be dug up and cleaned out. An open gutter is filthy, smells badly, taints the butter, breeds flies, and makes folks ill. Slops thrown around the door, are, if possible, as much worse than the drain, as the space slopped over is larger, and closer to the house. The remedy is a covered drain of some kind, to carry the slops to a distance, where they may be economized. They ought never to be thrown into the pump-sink, but into an open receptacle, from which the drain flows. A very good way which has commended itself to the writer, is to have a receiver not less than a foot square, laid up of brick, in cement, altogether about four feet deep. Out of this, from about the middle, the drain flows, also made of brick (though one of oak boards will last a long time), and into which, a little below the middle, the water pipe, from the pump-sink, enters. The foul water thrown in will deposit its sediment, and flow off tolerably clear by the drain, while the mouth of the sink-pipe, being below the surface of the water, admits of no foul air passing back to the house. It is easy to clear out the sediment in the receiver with a post-hole spoon, and to flush the drain by pouring a tub-full of water at a time into the receiver. The top of the receiver should be protected by a grating or a lid. To prevent foul air drawing up the drain, as it will often do, a U-trap of tile may be placed near the receiver. The trap should be under-ground, the top being level with, or raised a little above, the surface of the ground.

### Computing the Time.

A correspondent suggests that instead of computing the time in the manner now proposed, the twenty-four hours might be divided in accordance with the practice of the Chinese, who reckon from an hour (in our time) before midnight to the corresponding time next night—twelve hours, each hour being equal to two of ours. The benefit to be derived from the scheme is not exactly visible, yet it has the merit of novelty, which, in these days where a love of change is the predominant passion of the people, is alone sufficient to insure a favourable reception. Our correspondent further suggests that another pleasing reform in the present method of computing time might be effected if, in taking account of it in future, we reckon nights instead of days. This, according to Tacitus, was done by the ancient Germans; and it is stated in the Rev. John Campbell's 'Travels,' published in 1822, that "the practice of computing time by nights instead of days obtains among the Mashors, an inland nation dwelling in the interior of Africa." Curiously enough we have a tribe called Mashers now dwelling in the interior of London who also are notorious for turning night into day.—[St. James's Gazette.

Friends and enemies are many-sided, and while we may correctly see parts of their character, other parts are veiled from us. Every one has his virtues and vices, his excellencies and shortcomings, and while much we see in him may be actually there, there is much more of which we never dream.

"Well, Uncle Rube, how have you been since you came to live down here on the river?" "Po'ly, marster, po'ly." "You are not used to living in such an out-of-the-way place, Uncle Rube. You are suffering from isolation." "Dat's it, sah, dat's it. I se got 'em. I se suffered wid 'em mighty bad, marster. I had disrecommendered the name, but I knowed I had um."

If thy neighbor offend thee, buy his boy a drum.

# EATON'S Xmas Sale!

Our object in having this sale at this season is to make prices to suit the hard times and to reduce surplus stock in our several departments. To enable us to do this we have made some extraordinary reductions, as may be seen by our former advertisements, and by the rapid sale of these reduced goods day by day, especially in our Mantle and Dress Departments, and to have a still greater clearing of our Mantles we have some still greater reductions. We still continue our former reductions until every garment is sold.

## Jackets.

Those \$1.50 and \$3.00 Jackets are big bargains, and deserve the attention of every person requiring a cheap garment. We have put all our \$7.00, \$7.50 and \$8.50 Jackets at \$6.00 all round; these are heavy cloth Jackets, fully trimmed, and are a decided bargain.

To-day we offer fifty heavy Tweed Ulsters at \$5 each, regular price of these goods \$10.00.

## Eaton's Xmas Sale

All Children's mantles at big reductions. Extra heavy mantles for children, with capes at reduced rates.

## Silk and Plush Dolmans

Seventy-five dollar Dolmans at \$55. Sixty dollar Jackets for \$45; Fifty dollar Dolmans and Jackets for \$40.

Bargains in \$35, \$30, \$25 and \$20 Dolmans; every garment sacrificed.

## Eaton's Xmas Sale. Oilcloths.

During the sale we offer the contents of a large shipment of Table oilcloths 35 inches wide which we will sell at 30 cents a yd., all the newest patterns.

## Window shades

During the Xmas Sale we offer some extraordinary bargains in this department; you can get a variety of patterns at 50 cents a blind, goods that are ordinarily sold at \$1. We offer a plain blind, complete with spring roller for 65 cents. These spring rollers are the most convenient rollers to be found. No side strings, no fixtures, work automatically. Complete with blind for 65 cents each.

## Flannels.

Bargains in flannels! White Flannels, White and Grey Canton Flannels, Canton Flannels in all colors.

## Blankets,

Clearing prices for Blankets, white and gray. White Blankets, all wool, \$1.75, \$2.00, \$2.25, \$2.90, \$3.50, \$4.00 up. Extra superfine Canadian blankets reduced to \$3.00, \$3.50, \$4.00, and \$4.50. These goods are superior to any blanket made heretofore and are equal to the best English goods and sold at half the price.

## Bed Comforters.

We offer some special inducements in this line of goods, 5 bales to open to-day, full size 65 cents each. Fine English Sateen Covered Comforter, 7 lbs. weight, extra size for \$2.00.

## Xmas Goods.

Immense variety of goods suitable for Xmas presents, dolls, tea sets, wooden toys, vases, brackets, mantle stands, albums, easels, scrap books, tool boxes, tricks, &c.

# Eaton's Xmas Sale. 190 TO 196 YONGE STREET, TORONTO.

# GRAND DISPLAY OF NEW FALL GOODS AT PETTLEYS

Rich Mantle Velvets,  
Rich Dress Velvets,  
Rich Mantle Plushes,  
Rich Dress Plushes,  
Rich Black Silks,  
Rich Colored Silks,  
Rich Dress Satins,  
Rich Dress Goods,

Also a Magnificent Stock of Elegant MANTLES from the Best Manufacturers of London, Paris and Berlin.

Silk Plush Mantles,  
Silk Seal Mantles,  
Brocaded Silk Mantles,  
Brocaded Velvet Mantles  
Brocaded Cloth Mantles,  
Jersey Cloth Mantles,  
Jersey Cloth Ulsters,  
Jersey Cloth Jackets

We beg to call Special Attention to our display of MILLINERY, which is very Choice and Attractive, and worthy of the attention of the most fastidious.

INSPECTION INVITED.

# PETLEY & PETLEY King-St, East, Toronto (OPPOSITE THE MARKET)

### Bush Horses.

From the mode of life the half-wild bush horses of Australia lead, unaccustomed to the hand of man, and not dependent upon him for food, they learn to look upon him with alarm and suspicion, and it requires some manoeuvring to approach them without creating a premature panic. On the approach of a horseman one or two on the outside sound an alarm and make off toward the rest, who thereupon rush together, and a general concentration takes place. It is a fine sight to see a herd of these horses, of every size, age, and color, mustering in this manner from hill and valley, as if by common consent. Though physically very powerful, they assume no threatening aspect; their safety lies in their speed; and as they eye the suspicious object their meaning is obvious. They say, as plainly as looks and gestures can say: "Now, what do you want? If you are a stranger, pass on quietly; but if you are for a gallop, we are quite ready to try of what mettle that horse of yours is made."

### Establishing Relationship.

"Ma, is the devil the father of lies?"  
"Yes, dear."  
"And is a lie an invention?"  
"Yes."  
"Then necessity is the devil's wife, ain't she, ma?"  
"How do you make that out?"  
"Why, she's the mother of invention."

It has been proved, by repeated experiments, that straw saturated with a solution of lime or common whitewash, is incombustible. The fact is of great importance, especially as thatch is not only rendered fireproof, but more durable. A solution of alum has been tried, but being soluble the rain destroys its virtues.