

of a steamer, weighing over 65 tons! In half an hour, 544 crucibles, of 64 lbs. each, were poured into the enormous mould, which was 14 feet in length and 3 feet in diameter.

The new war invention, called the fish-torpedo, is propelled under water by compressed air acting on a screw propeller. On trial at Sheerness, one thus sent a distance of 140 yards, against an old hulk, with a charge of 67 lbs. of gun cotton, struck it, exploded, tore a hole 20 feet by 10, and sank the hulk at once.

Soluble glass or liquid quartz may be made of 35 lbs quartz, 30 lbs potash, 3 lbs charcoal, the whole being fused, pulverized and digested in water. It is used to cover woodware for preservation and to make it fire-proof, also to cement glass and pottery.

Two French chemists have succeeded in producing hydrogen gas very cheaply, by mixing moistened alkaline and earthy alkaline hydrates (such as the hydrates of potash, soda, chalk, &c.) with coal, coke, peat or other fuel, and heating to a red heat, when they decompose into hydrogen and carbonic acid. The hydrates can be moistened anew, and used over again indefinitely.

The *Journal of Chemistry* says that a razor-strop does not sharpen the razor edge so much by wearing away the hard steel as by adjusting the edge so that it can act directly upon the beard. The fine edge of a razor, when examined by a microscope of high power, resembles a saw, the teeth of which are jagged and irregular. The strop adjusts these thin bits of steel, so that they stand in line, and they then can saw off the beard with greater facility. And this explains why with a drawing stroke the razor cuts so much better than if pulled in a direct stroke.

## Heath and Home.

### TAKING THINGS WITHOUT ASKING.

Boys seldom like to hear much about prayer. I never did when I was a boy. I had an idea that it was not manly to pray much, and so I said my prayers when I was obliged to and never uttered a real prayer till I was driven to it by a sense that it was certainly very unmanly not to pray. Boys have a great idea of being manly, and I honor them for it; but they often make sad mistakes in the way which they take of showing manliness. But one thing you will admit is manly and noble, and that is, to ask for what you really wish to receive. It is wrong to take without asking and very shabby not to say "thank you" after receiving a gift; yet this is just what a person does who does not pray. I once had that lesson impressed upon my mind in rather a peculiar manner, and I must tell you about it. When I was a boy, I was playing out in the street one winter's day, catching rides on sleighs, and it was great fun. Boys would rather catch rides any day than go out regularly and properly to take a drive. As I was catching on to one sleigh and another, sometimes having a nice time, and oftentimes getting a cut from a big black whip, I at last fastened like a barnacle to the side of a countryman's cutter. An old gentleman sat alone on the seat, and he looked at me rather benignantly, as I thought, and neither said anything nor swung his old whip over me; so I ven-

tured to climb up on the side of his cutter. Another benignant look from the countryman, but not a word. Emboldened by his supposed goodness, I ventured to tumble into the cutter and take a seat under his warm buffalo-robe beside him, and he then spoke. The colloquy was as follows:

"Young man, do you like to ride?"

"Yes, sir."

"Do you own this cutter, young man?"

"No, sir."

"It's a pretty nice cutter, isn't it?"

"Yes, sir, it is, and a nice horse drawing it."

"Did I ask you to get in?"

"No, sir."

"Did you ask if you might get in?"

"No, sir."

"Well, then, why did you get in?"

Well, sir, I—I thought you looked good and kind and that you would have no objection."

"And so, young man, because you thought I was good and kind, you took advantage of that kindness, and took a favor without asking for it?"

"Yes, sir."

"Is this ride worth having?"

"Yes, sir."

"Well, now, young man, I want to tell you two things. You should never take advantage of the kindness of others; and what is worth having is worth at least asking for. Now as you tumbled into this sleigh without asking me, I shall tumble you into that snow-drift without asking you."

And out I went like shot off a shovel, and he didn't make much fuss about it, either. I picked myself up in a slightly bewildered state, but I never forgot that lesson.

God is good, and kind, and benevolent, but He wishes us to ask for what we want, and to thank Him for what we receive; and there is no true manliness in taking the best of Heaven's gifts and making no acknowledgment for them; is there, boys?—*Churchman.*

### HOW TO BE HANDSOME.

Most people like to be handsome. Nobody denies the great power any person may have who has a good face, and who attracts you by good looks, even before a word has been spoken. And we see all sorts of devices in men and women to improve their good looks—paints and washes, and all kinds of cosmetics, including a plentiful anointing with dirty hair oil.

Now not every one can have good features. They are as God made them; but almost any one can look well, especially with good health. It is hard to give rules in a very short space, but in brief these will do:

Keep clean—wash freely and universally with cold water. All the skin wants, is leave to act freely, and it will take care of itself. Its thousands of air holes must not be plugged up.

Eat regularly and simply. The stomach can no more work all the time, night and day, than a horse; it must have regular work, and regular rest.

Good teeth are a help to good looks. Brush them with a soft brush, especially at night. Go to bed with the teeth clean. Of course, to have white teeth, it is needful to let tobacco alone. Any powder or wash for the teeth should be very simple.