

## THE CLOCK OF THE PRESENT DAY DESCENDED FROM THE SUNDIAL; INVENTED IN THE YEAR 1860

(Toronto Globe.)

London's Big Ben is sick. A huge crack has appeared in his giant body and grave anxiety was, for a time, felt among his millions of friends, both those at close range to his home in the towers of the Parliament Buildings of London, England, and those who have heard him by radio in distant parts of the world. And great was the relief experienced when his doctors—the clockmakers who were responsible for his birth some sixty-eight years ago—announced the fact that they could cure him; that soon his voice would be as sound and as clear as ever.

Big Ben is a far cry from the era when man told the hour by placing a stick in the ground and watching its shadow lengthen as the sun passed by. Much brain and brawn and generations of lives have been devoted to the science of perfecting the clock as it is known today.

The sundial, invented by Berossus the Chaldean historian and priest, about the year 250 gave the first semblance of accuracy in time-telling. Cicero was the proud possessor of one of these and relics of the instrument were found in the ruins of Pompeii. For centuries the sundial, shaped like a bowl, with a pointer placed in it, was the standard method of recording the hours.

Those who are forced to listen to long harangues in Parliamentary and civic spheres may, perhaps, think favorably of the water clock, which succeeded the sundial, and which was used in the law courts of Rome to gauge the speaker—an orator being permitted to plead his case until all the water had run out. Some of our modern advocates may acknowledge an affinity with the Roman pleader who put muddy in the clocks so that they would run more slowly.

Some of the older generation may remember the hour-glass which was

in use in the British Navy as late as 1839 and the origin of which was an invention in Alexandria in 300 B. C. The hour-glass is the direct ancestor of the watch as it is carried on the person today. A great deal of sentiment seems to have surrounded it, and it has been the subject of much poetry.

The first real clock as it is known today, is said to have been built by Gerbert, a monk who was later elected Pope, in about the year 990 and from that time to the present there has been a steady development in the instruments of time-telling. The principle of pendulum movement was discovered by Galileo who, when a youth, found himself one day in the great Cathedral of Pisa. A huge lamp suspended by a chain, hung overhead and as Galileo prayed his attention was attracted by the fact that the movement of the suspended lamp from one end of the arc to the other was always in perfect time. This gave him the idea of the pendulum, upon which, unfortunately, he failed, or was unable, to take out any patent, so that the credit really fell to another's lot.

Our eight-day clocks may be more or less put to shame by the knowledge of the fact that the "father of all modern clocks"—the renowned clock which Charles V of France ordered to be constructed for his palace—ran for 471 years before its ticking ceased; and, although its spirit has departed, its huge body reposes in its original position in the palace. The designer of this wonderful clock, Henry de Vick, a master mechanic of his day, was called from Wurtemberg to make the clock for the King of France. If "imitation is the sincerest flattery," then his handiwork must have proved a perfect production indeed; because for the next 300 years it was copied by clockmakers all over Europe.

From the clock to the watch was but a comparatively short step. Peter Henlen, a locksmith of Nuremberg, is supposed to have invented the first watch in the year 1500. His product did not greatly resemble the dainty timepiece of today, for it was a heavy affair, manuf. a crystal and minute-hand. The first crystal made its appearance in 1613 the minute-hand in 1687 and the second hand about 100 years later.

The watch industry invaded England in 1627 when the Worshipful Clockmakers' Company was formed. Then Switzerland came into fame as a watch-manufacturing country. By 1799 the City of Geneva listed 6,000 watchmakers and was putting on 50,000 watches a year while twenty years later the Neuchatel district was making no fewer than 130,000 timepieces annually. It was after the American War of the Revolution before watchmaking made its advent on this continent.

### WELL, YES.

Bobbed hair is not a sin,  
Entails no moral wreck,  
She to the throne may win  
Despite her shaven neck,  
So says a sage divine  
To his parishioners,  
And his wise view is mine  
My word with his concurs.

Yes, it is not a sin,  
To shear, to shave, to clip  
'Tis not, indeed, akin  
To any moral slip;  
And yet—and yet I view  
These heads from time to time  
So I am telling you  
That sometimes it's a crime.

Madge—How in the world could  
Dickie and Dolly get into such a mis-  
understanding?

Judith—Wednesday night they  
happened to be partners in a bridge  
game.

Husband—I simply cannot make  
your household books balance, dear.  
Wife—Oh John, and you say  
you're a certified accountant!

This is the season of the year  
when newly married people get  
ready to forgive each other for  
their relatives' presents.

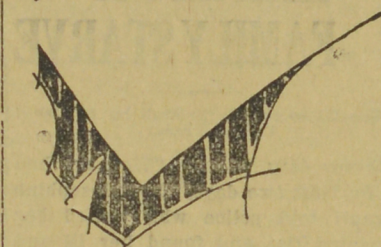
## LETTERS TO BE WITHDRAWN

Apparently a very high value is placed by college "letter men" on the symbol of their prowess in the United States. Undergraduates who sign professional contracts are threatened with the loss of their letters. The temporary vogue of professional football has attracted many gridiron stars, and concerted efforts have been made by individual colleges and by their organizations to discourage their men from becoming professionals, even after graduating. The following statement, issued by Chairman Sydney E. Hutchinson of the Council of Athletics at University of Pennsylvania, is significant: "Any student turning professional while still an undergraduate and eligible to represent the university on any athletic team will be denied his letter and all previous letters, and his membership in the varsity club will be revoked."

R. D. Fudger of Saint John is among the guests at the Queen.

## BLUNDERS

After a day  
Return to  
David Publishing Co.  
E. L. Thomas  
216 Fourth Ave.  
Calgary,  
Alta.



### WHY IS THIS WRONG?

Thousands of letters are delayed in delivery from two to ten hours in big cities because business men do not place their return street address on letterheads and envelopes. Even though a company may be an important one, all postal employees do not have its address committed to memory. Consequently its mail will surely be delayed if persons who must reply to its letters are given no street address.

## REVISION.

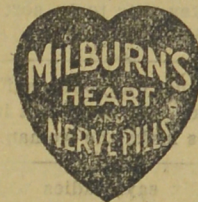
Arms and the man, I sing,  
So once the poet wrote.  
To this the sweet young thing  
Adds but a single note.

Arms and the man are right,  
Are right as right, says she,  
But this brings more delight—  
Arms and the man and me.

Thomas Tully of Chicago is registered at the Queen today.

## HAD BAD SPELLS WITH HER HEART

Mrs. R. G. Hall, Bolton Centre, Que., writes:—"Some time ago I had bad spells with my heart which I believe was caused by nervousness. I tried everything I could think of, but could get no relief until one of my friends persuaded me to get a box of



After I had taken a few boxes I got wonderful relief.

I now weigh one hundred and thirty-five pounds where, before, I never went over ninety."

Price 50c. a box at all druggists or dealers, or mailed direct on receipt of price by The T. Milburn Co., Limited, Toronto, Ont.

## TRAP NESTS

If you are in the Poultry business go at it systematically.

Keep tabs on your hens by trap nesting them.

It's the only way to pick out the boarders.

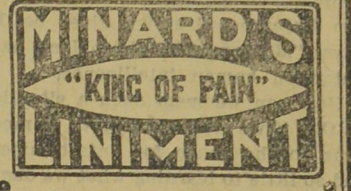
I make a complete set of four nests for only \$4.00.  
Satisfaction guaranteed.  
Send me a trial order.

FRED LYONS  
260 Aberdeen Street  
FREDERICTON, N. B.



Bathe in Minard's and warm water, rubbing the solution into the aching parts with the finger tips.

Minard's is also splendid for sprains, bruises and strained ligaments.



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COME DOWN NOW and you will find the true Christmas Spirit awaiting you among the miles of aisles of glorious gifts. Everything is in orderly, cheerful readiness!

For your own sake more than our let us repeat — "PLEASE DO YOUR CHRISTMAS SHOPPING EARLY."