

Graphic Descriptions of the Aeroplane Races at Rheims,
France—How It Feels To Be an Aviator—Farman
Carried Two Passengers—History Being
Made Fast.

Cheered by the Crowd.

In the gathering darkness hands were stretched out to the triumphant flyer, and he was borne shoulder-high, to the sheds, where a fresh batch of cheers awaited him. Asked regarding his impressions, M. Farman said: "Impressions are according to what one feels. I feel immense joy. I begin to feel full of hope. Can you tell, can one?" My start was satisfactory, and as my engine was running well, I speedily became convinced that I would accomplish an excellent performance, and, therefore, I decided I can to economise my resources in order to continue longer. I kept low purposely. I could have flown higher, but that was not my intention. I tried to regulate the carburettor near the earth. I had some gusts of wind to contend with in the hollows of the plain; there is always a strong breeze, absolutely calm air is so rare. You who gave me the first idea of the

millions a year on our army and and we ought to be spending a deal more than we are on old age pensions.—(Cheers.) Very expensively dares quarrel with them? Not a—(Cheers.) They are the great contribution to the national prosperity. This has even been called to make—(Cheers.) They have anticipated a cloud of gloom that has for centuries over the lives of our poor, darkening those lives, blighting those lives, breeding an atmosphere of misery and of despair which even the coming of religion cannot remove. I do not think it is proper to exaggerate the happiness that has been conferred upon mankind by workmanhood by old age pensions.—(Cheers.) For thirty years past I have been the humble administrator of the will of an uncle of mine of a

Aeroplanes Galore.
History has been made so fast during the past week that it is already difficult to recapture the sensation with which only a few days ago one first saw men flying at Betheny. For my own part, I may say that after eight days during which aeroplanes

What is to come we know not, but we know
That what has been was good.
Yes, how good this beginning has
been! I do not believe that any of
these men who have delighted us with
their accomplishments at Rheims, will
ever again, whatever triumphs the future
may hold for them, be able to rival
the achievements they have already
when, for the first time they have
come out to play together before an
admirer world. For it is obvious that
the men who can fly, delight in doing
so, and still enough to be vainly
to be charmed by the plaudits which
any fine feat of skill or daring
evokes. By and by all that will have
gone and most of them will probably
be selling aeroplanes at present

[illegible]

The Instruments With Which
Cook and Peary Worked
Useful Little Sextant.

no Teddies.

It was a awe-inspiring moment to must have been for Cook and Pearl to have stood up, and, with trembling hands, read the story from these small instruments proclaiming the North Pole. How they must have looked—rubbed their eyes and looked again and again, lest they were on being taunted by their hunger and fatigue.

This joy has spread throughout the civilised world, and speculations as many as to how the discovery of the pole was made certain, especially as there was apparently nothing but ice and no landmarks to guide the way. It is true, the great fact was not mere luck or guesswork, but brought about by scientific calculations.

It is, I feel, there is nothing but

vast stretch of frozen waste around-
ing the pole, but there are many land-
marks in the form of celestial bodies,
which, with the aid of the sextant,
proclaim the explorer's position as
the different degrees are covered.

There are several ways by which an
observer can determine the true
axis of the earth. For instance, by
watching the sun and noting whether
it makes a true circle around the hori-
zon. If no deviation occurs except a
slight elevation as the declination of
the sun increases, which it does to-
ward the tropic, the observer knows
that the true axis is at right angles to
the horizon, and which is equal to twenty
minutes of time, the observer may
feel assured that if he stands not di-
rectly at the pole, he is within close
proximity to it.

too, which can determine the position of the pole; but, considering their bulk and weight, it would be anything but feasible to attempt to carry them on a polar expedition.

Left for the sextant, a very little hand instrument, to befriend the explorer in reckoning his position.

It is essentially composed of two mirrors, a telescope and an arm pivoted at the center of the telescope which is rigidly connected one of the mirrors at the upper end; to the lower end is attached the venter which is made to slide over a divided scale, and is graduated in degrees.

In construction, the mirrors are separated a few inches apart, and raised about five or six inches above each other.

The Index mirror, as it is called, is set perpendicular to the plane of the divided arc; the lower horizon mirror or glass is fixed to the frame, and is divided into two parts. The lower one is silvered, and the upper one is transparent.

The telescope is fixed to a frame on plane with the horizon glass.

**BIRRELL'S BLEND OF ARGUMENT AND WIT;
IRISH SECRETARY'S GREAT BUDGET SPEECH**

Dukes and the Land Taxes. You all know the answer why there is this fuss and why there is this parade of principles. It is the land taxes.—(Hear, hear.) Now we know. The secret is out. It is the land taxes. Well, Manchester knows all about it. It was returned, as a matter of fact, by the noblest of all men. What a history it would be, if it written, of this corner of the country in which we now assemble! (Hear, hear.) The early part of (reign of Queen Elizabeth—not so very long ago after all this district, I think, the wealthiest, was the poorest. Thereafter, it was returned, as

for any orator, for any economist know not, I care not, who may be to stand up before any audience such size as this and defend his position of one of the great necessities of the State and necessary tax it is possible to conceive of.—(Cheers.)

Then there was a great fuss about valuations.—(Laughter.) Oh! for many nights were we kept out of because of valuations.—(Laughter.) Because of valuations? It would be the landlords—to value their own property,—and so at last in our despair.—(Laughter.)—we said “Very well then we will do it ourselves.” They said, “But it made no difference.” They said, “It made no difference.” They thought after all, if there was to be a valuation perhaps it would be better if they had made it themselves.—(Laughter.)

You know the day is gone by for the ignorance about the property of the State may be known so that the State may take its fair share of it all comes out when you are dead.—(Laughter.) Had you not better take the ugly facts in your lifetime?” This aversion to the property of the State is so suspicious; we cannot feel there is something behind it.—(Hear, hear.) Why do not people have an inventory of their property?—had the same story half a century ago when Mr. Gladstone was the first time.—(Laughter.) And he was the forerunner of all this. In 1852 he had a tax on what are called success-

duties on land, and there was just some outcry. A Tory ex-Lord Chancellor positively shed tears in public.—(Laughter.) He said the consequences—and he was quite right—of Gladstone's being made to be that he would have to show their friends' deeds—(cheers)—and have them at Somerset House. Your sheeps he so said (for he was a poetical Chancellor), will no longer be as they will be overhauled by strange men. Well, that has all been done. The sheepskins have been overhauled. Somerset House has got copies of them all. We know the whole of them and we want to know the whole of them and we want to know the whole of them for the purpose of taxation, the value of the sheepskins in this country.—(Hear, hear.)

The Government and the Liquor Monopoly.

Well, the land taxes are through House of Commons—(cheers), and now we are face to face with the little job—the liquor taxes. A set of orators appear upon the stage. Mr. Freytagman, who fought his way to the top of the ladder, is in the newspapers, a well-earned day, and the advocates of the first step upon the Parliamentary clearing their throats.—(Laugh.) Well, now, we are here dealing with a subject that is not very popular. You cannot make land, you make beer—if there is enough near your premises—(laughter)—the sale of beer is a monopoly. The ancient statutes monopolised the sale of beer under the private sale with perhaps £25 or £30 a year. residential purposes obtains a licence from the magistrates and is worth worth £500 or it may be £400 a year. But the third class of magistrates did, by granting a licence was a manufactured property, we have had free trade in liquor don't say we could; the risks were great for the health of the community. The ancient law has been man been as free to sell beer and whisky as he now is to sell beer. There would have been no monopoly, and this country would be groaning under the vast burden of the liquor tax. The poor man have to pay, or have to be the trade itself, to free this liquor fee. Now the budget increases duties, makes them pay more for monopoly. The figures have been that may be due to the small House of Commons. As soon as they are the fact is proved. These vast and industries, these great call I say nothing about the consideration that may be due to the small. Many—but the cast hotels, the vendors of intoxicating liquors ludicrous the sums they pay for license to the State for their monopoly. The law is complicated has a great deal to do with it.

(Continued on Page Sixteen)

In practice the observer looks toward the horizon through the telescope and visualizes the glazing at the point under the sun. This action causes the image of the sun to appear in the index mirror facing the sun which, in turn, reflects it into the horizon glass, with its back toward the observer. Light rays from the sun pass to the eye, the light rays almost forming the line Z.

But the letter of the horizon and the image of the sun will not coincide. It appears as if the sun were miles behind the arm attached to the index mirror. The arm is carefully moved backward or forward until the two mirrors are parallel, at which time the two images must coincide, provided the object is at an infinite distance.

The arm is now clamped to the stand containing the different marks of degree, and then read for the proportional distance between the two points.

In other words, if you were to place a small mirror in the palm of one hand, and after separating them by few inches apart raise one above the other, you would have the means of determining the distance of an object mentioned in the form of the letter Z. In order to catch the image of the sun you would necessarily manipulate the upper or index mirror, facing the sun and held in the left hand, and from the horizon glass be seen direct through the telescope.

But this is not all, for we know that when light rays enter a different medium like our atmosphere, especially approaching the horizon, they are refracted; the sun light, appearing in a false position to the eye. The observer must not only look for this discrepancy, but must turn into careful consideration for final correction, for the dip of the horizon, accurate temperature, atmospheric pressure and the parallax, before the true position is determined.

These skills and use of the sextant requires considerable dexterity, for even at its best it is far from being accurate, probably coming within a quarter of a mile of true reading.

To be absolutely accurate in finding the position of the sun, the telescope would have to be stationary part of the earth, and for the present, of course, this is impracticable.

40,000 of Them Scattered Over
the North—Their Social
Fabric.

There is every prospect of a closer acquaintanceship with that singular people that makes the Arctic regions its home, and to which polar research owes not merely a great deal, but the material means of its most effective pursuit. A race that survives the struggle of Arctic life, maintaining a level that is above the savage, must present characteristics entirely out of the ordinary that differentiate it from the race of the temperate zone fully as much as the people of the tropics differentiate from the people of the tropics.

Without chiefs or rulers, without regular property, the social fabric of the Eskimos is distinguished by utter dependence of one upon another and the avoidance of any open rivalry. The Eskimo family is a family affair and there are three recognized divisions, viz., the family, the inhabitants of one house, and the temporary dwellers of one wintering place. Their simple laws are framed to protect the race at the cost of individual develop-

Scattered from Eastern Greenland to Northern Siberia, they enjoy the distinction of being the most widely distributed aboriginal people in the world; their most eastern group would have to travel 5,000 miles to reach the most western. The idiom spoken over this vast region, of possibly 40,000 people, is the same everywhere except for some differences of dialect. Like all American tongues, it is polysynthetic; an entire sentence may be condensed into one word. The missionaries have taught the Eskimos to read and to write in their own language and there is actually an Eskimo literature that boasts some native art.

(Continued on Page Sixteen.)