or
and if

$$
p^{\prime}<0, \quad c>0, \quad 0^{\circ}<\psi<54^{\circ} 44^{\prime}
$$

$$
\left(\frac{p}{3}\right)^{3}+\left(\frac{q}{2}\right)^{2}<0
$$

where

$$
\frac{p}{3}=\frac{1}{81}\left[9\left(2 s^{2}+q^{\prime 2}\right)-7 c^{\prime 2}\right] ; \quad \frac{q}{2}=\frac{5 c^{\prime}}{9}\left[\frac{p}{3}+\frac{1}{9}\left(m^{2}-\frac{11}{10} q^{\prime 2}\right)\right]
$$

and

$$
m^{2}=c^{2}+s^{2} .
$$

For solution the equation in $z$ is written in the form
where

$$
y^{\prime}=\left(\zeta+c^{\prime}\right)^{2}-\left(\eta-q^{\prime 2}\right)=f(\vartheta)=0
$$

$$
\zeta=s \tan \vartheta ; \quad \eta=\frac{n}{s} \cos \vartheta
$$

A convenient graphical solution is proposed for the solution of $f(\vartheta)=0$. Then

$$
\rho / R=z=s \tan \vartheta+c .
$$

Geocentric distances correct to four or five decimals result from the graphical solution. Further decimals may be obtained by a simple differential correction.

In practice no case with three solutions has been encountered.
C. A. Noble, Secretary of the Section.

## THE WINNIPEG MEETING OF THE BRITISH ASSOCIATION.

The seventy-ninth annual meeting of the British Association for the advancement of science was held in Winnipeg August 25 to September 1. Fourteen hundred members and associates were in attendance. The opening event was the address of the President of the Association, Sir J. J. Thomson, on Wednesday evening, August 25, in which he gave an account of some of the more recent developments in physics and in his opening remarks took occasion to urge a closer union between mathematics and physics and to emphasize the advantages of

