From one hundred and sixty-seven stars whose radial velocities were less than fifty kilometres per second, a solution for the sun's motion was made with the result:—

Right Ascension of Apex.	270°·0
Declination of Apex	+14°·7
Velocity of Sun	−17·7

If the motion of each star is corrected with these values, we find that the average radial velocity for the one hundred and sixty-seven stars is 15·2 kilometres. The list of stars includes nine B-type stars, seventeen A, forty-eight F, forty-eight G, thirty-four K, seven M, and four of unknown type. Campbell's average radial velocities for this distribution of stellar types would be 13·8. The agreement of the two values supports the conclusion that the mean velocity of the stars employed is not greatly in excess of the average.

The proper motions at right angles to the solar motion (τ components) and along the direction of solar motion (v components) were also computed with the above values for the solar motion. The position of the apex as given by this special group of stars is preferred, because we then demand only that the motions shall be at random among themselves which is a less radical assumption than that they be at random with respect to a given direction, an assumption we would have to make if we had adopted any other position of the apex.

The direction of the solar motion determined from this solution has very little weight when applied to the universe in general, but it is interesting to note in passing that it is the declination which shows the variation from the usually accepted values. Nearly all the stars used are in the northern hemisphere. This was true also of the stars employed by Campbell* in his first solution for the sun's way from two hundred and eighty velocities. Both solutions give low values for the declination of the apex. Whether the small declinations are due to the northern positions of the stars or are to be ascribed to the chance operation of unsymmetrical data is hard to say. The agreement would tend to show that the northern hemisphere gives low values for the declination of the apex.

*Ap. J. vol. 13, 80.