	T	E (volts)		T	E (volts)
For cell (1)	0°C	1.286	For cell (2)	0°C	1.262
	24	1.264		36	1.246
	72.5	1.226		56	1.240

Liquid junction potentials and temperature junction potentials are known to be neglibly small compared to the case at hand.

In the light of these preliminary data the transition temperature appears to be in the vicinity of 60°C. Further work is in progress with the purpose of refining the method and determining the temperature to a greater degree of precision.

There is evidence of a strong tendency toward polarization and to eliminate this possibility it will be necessary to use a vacuum tube voltmeter. Further data will be presented later.

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THE FRANK CARNEY COLLECTION OF MAPS

Edwin J. Foscue

The Department of Geology and Geography of Southern Methodist University has been fortunate in securing the entire collection of wall maps from the private library of the late Doctor Frank Carney[1] sometime Professor of Geology and Geography at Baylor University, Waco, Texas, and formerly of Denison University, Granville, Ohio.

Doctor Carney, who traveled widely, had made map collecting a hobby. Whenever he found a map that he wanted for his collection he secured it regardless of price. In that

[1]See biographical sketch, "The Life and Works of Doctor Frank Carney" in *The Southwestern Social Science Quarterly*, Vol. 16, No. 3, pp. 51-59.

way he obtained many foreign maps not found in the average collection of an American college professor. Some of the maps cost originally more than $35.00 each, exclusive of the spring-roller mounting, and import duties, but all of them were used in his class room and laboratory at Baylor University, even though they were part of his private library. While some of the maps in the collection were brought to Waco from Denison, most of them were purchased after Doctor Carney began teaching at Baylor University in 1929. In a brief period of five or six years, Doctor Carney built up one of the finest collections of wall maps in the United States, and easily the best in the southwest. This collection, which Southern Methodist University has secured, comprises one hundred and twenty-five large wall maps, including American, English, French, Spanish, and German maps.

The American maps are of two sets, (1) the Atwood Regional-Political Maps, published by A. J. Nystrom and Company, Chicago; and (2) the Goode Physical Maps, published by Rand McNally and Company, Chicago. The Atwood maps represent six world plats (two to each sheet) showing summer and winter rainfall, thermal regions, vegetation regions, population, and occupations. The Goode set includes large physical maps of the continents showing elevations by means of colors.

The English maps include (1) the Oxford Rainfall Series, edited by A. J. Herbertson, and published by the Oxford Press; (2) the Johnston Physical-Political Maps, published by W. & A. K. Johnston, of Edinburgh, Scotland, and (3) the Philips' Comparative Series of Wall Maps, published by the London Geographical Institute. In the Oxford maps, only the rainfall series is represented, there being a rainfall map for each continent. The Johnston Physical-Political set (Bathy-Orographical), contains large maps of each continent. In this series elevations on the land are shown by hypsometric colors of green and brown, and the ocean depths by shades of blue. The Philips' Comparative Series comprises maps of relief, climate, temperature, natural vegetation, and density of population for each of the continents.

The French and Spanish maps of the Carney collection are limited to a few special ones edited by Vidal de la

Blache, published in Paris, and a map of Spain published in Madrid.

The German maps comprise by far the largest part of the Carney collection, and consist of (1) Gaebler Political and Physical Wall Maps, (2) the Sydow-Habenicht Series, and (3) the Hermann Haack Series of Physical Maps, published by Justus Perthes of Gotha, Germany. All of these maps have their text printed in German. There are only five of the Gaebler maps in the collection, represented by physical maps of some of the major countries of Europe. The Sydow-Habenicht Series is well represented by physical maps of each of the major countries of Europe. The Haack Maps, undoubtedly the finest wall maps published, are represented by almost the complete set.

In addition to the series described above, the collection contains several special wall maps such as the Köppen-Geiger *Klimakarte der Erde*, and others. A complete list of the wall maps in the Frank Carney Collection follows. The letter following each map indicates its series classification as shown in the following key.

Go	Goode Series
A	Atwood Regional-Political Maps
J	Johnston Physical Political Maps
O	Oxford Rainfall Series
P	Philips' Comparative Wall Atlas Maps
1aB	maps edited by Vidal de la Blache
Ga	Gaebler Wall Maps
S-H	Sydow-Habenicht Series
H	Hermann Haack Physical Maps

THE MAPS OF THE FRANK CARNEY COLLECTION

North America
- Physical Map of North America (Go)
- The United States and Mexico (J)
- United States and Central America (H)
- North America Physical (S-H)
- Dominion of Canada and Newfoundland Political (P)
- Mean Annual Rainfall (O)

South America
- Political Map of South America (J)
- Mean Annual Rainfall (O)
- Temperature (P)
- Summer Climate (P)
- Winter Climate (P)
- Natural Vegatation (P)
- Commercial Development (P)
- Political (P)

Europe
- Physical Map of Europe (Go)
- Bathy-Orographical Map of Europe (J)
- Summer Climate (P)
- Winter Climate (P)
- Natural Vegatation (P)
- Actual Temperature (P)
- Political (P)
- Density of Population (P)

Political Map of France (1aB)
Belgique, Political and Industrial (1aB)
Belgique, Physical and Agricol (1aB)
Northwestern Germany, Physical (H)
Political Map of Germany (H)
Northeastern Germany, Physical (H)
Germany, Physical (H)
Danubian Countries (H)
Italy, Physical (S-H)
The Iberian Peninsula, Physical (S-H)
Balkan Peninsula, Physical (S-H)
Scandinavia, Physical (S-H)
British Isles, Actual Temperature July (P)
British Isles, Actual Temperature January (P)
British Isles, Density of Population (P)
British Isles, Relief and Communications (P)
British Isles, Political (P)
Mediterranean Lands Physical (P)
Balkan Peninsula, Physical (Ga)
Italy, Physical (Ga)
Scandinavia, Physical (Ga)
Southwest Germany, Physical (Ga)
Netherlands and Belgium, Physical (Ga)
Physical Map of France (1aB)
Alps and Danube Basin, Physical (Ga)
Switzerland, Physical (H)
Mean Annual Rainfall (O)

Asia

Bathy-Orographical Map of Eurasia (J)
Mean Annual Rainfall (O)
Further India and the East Indian Archipelago (H)
Natural Vegetation (P)
Commercial Map of China (P)
Asia Political (P)
Asia Actual Temperature (P)
Eastern Asia, Physical (H)
Asia Climate (Winter) (P)
Asia Climate (Summer) (P)
Asia Physical (P)

Australia and New Zealand

Actual Temperature (P)
Natural Vegetation (P)
Summer Climate (P)
Winter Climate (P)
Political (P)
Australia and Polynesia (H)

Africa

Mean Annual Rainfall (O)
Summer Climate (P)
Winter Climate (P)
Temperature (P)
Natural Vegetation (P)
Political (P)
Physical (P)

The World

Physical Map of the World (Go)
Imperial Map of the World in Hemispheres (J)
Political Map of the World (J)
Mean Annual Rainfall of the World (O)
World Pressure and Winds (O)
World Thermal Regions (O)
Annual Isotherms (H)
January Isotherms (H)
July Isotherms (H)
January Isobars (H)
July Isobars (H)
Physical Map of the World (H)
Political Map of the World (P)
League of Nations Map of the World (P)
Climates of the World (Koppen-Geiger)
Summer Rainfall-Winter Rainfall (A)
Thermal Regions-Vegetations Regions (A)
Population-Occupations (A)
World Political (Whitbeck-Finch)