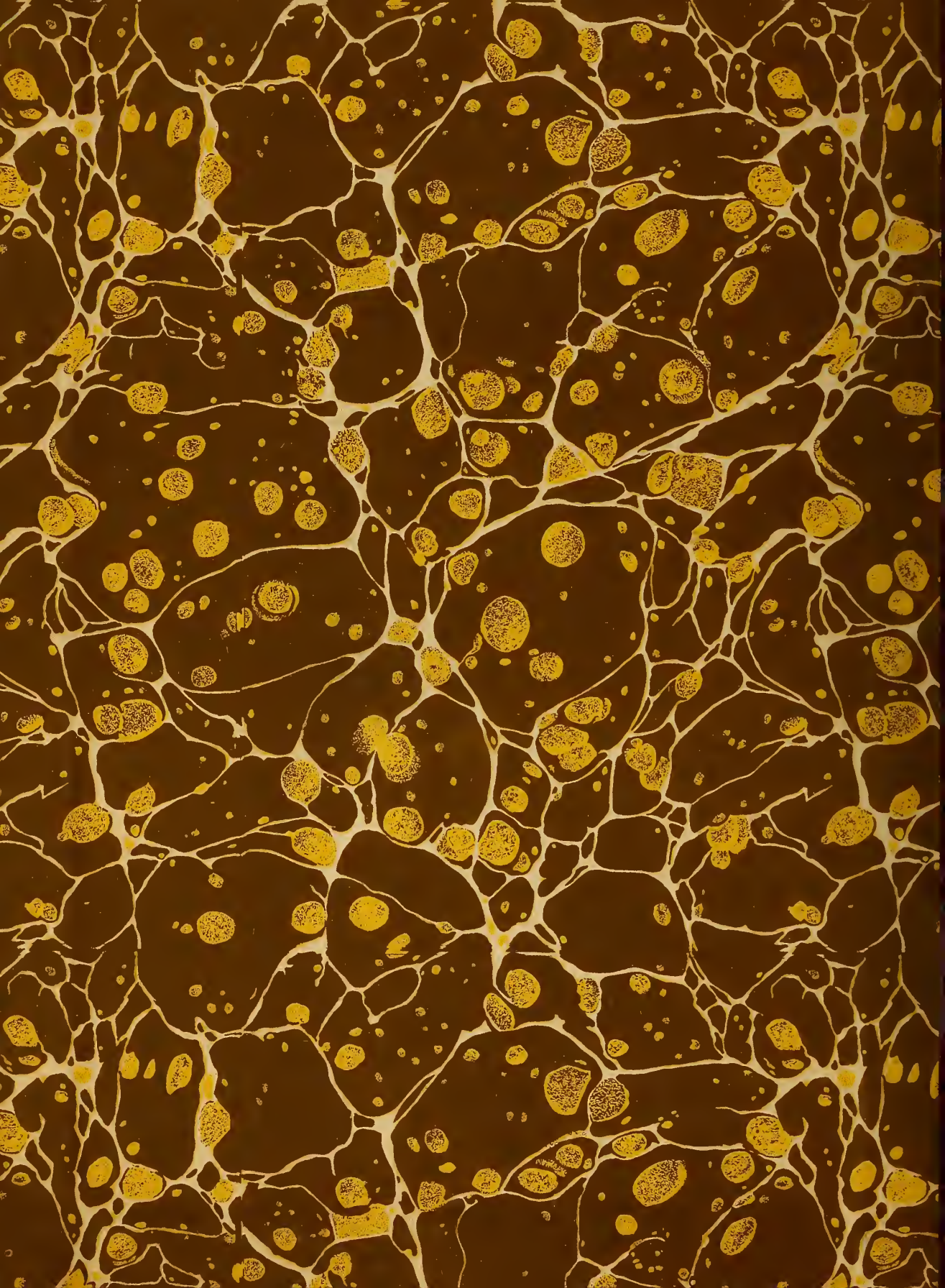
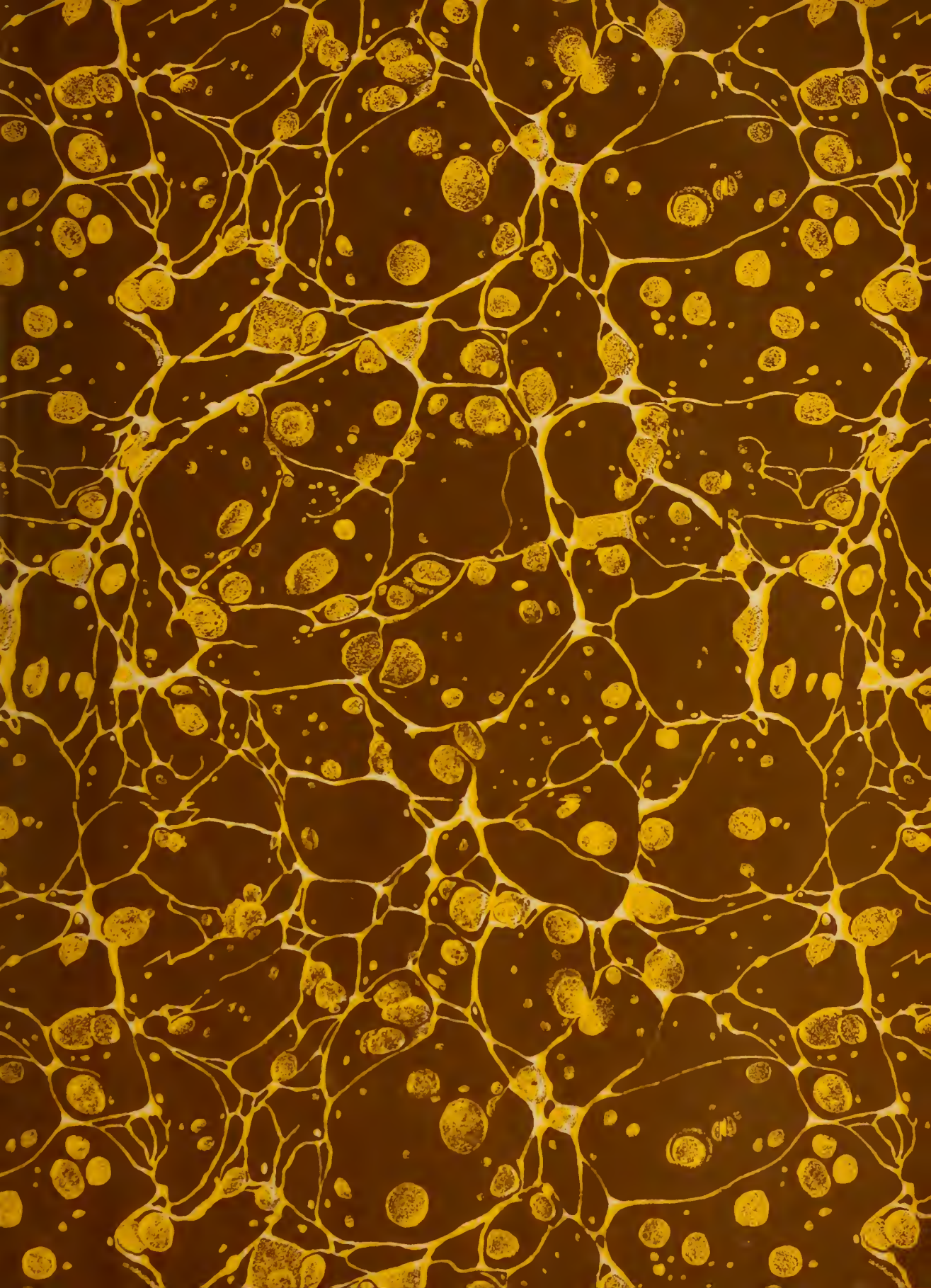
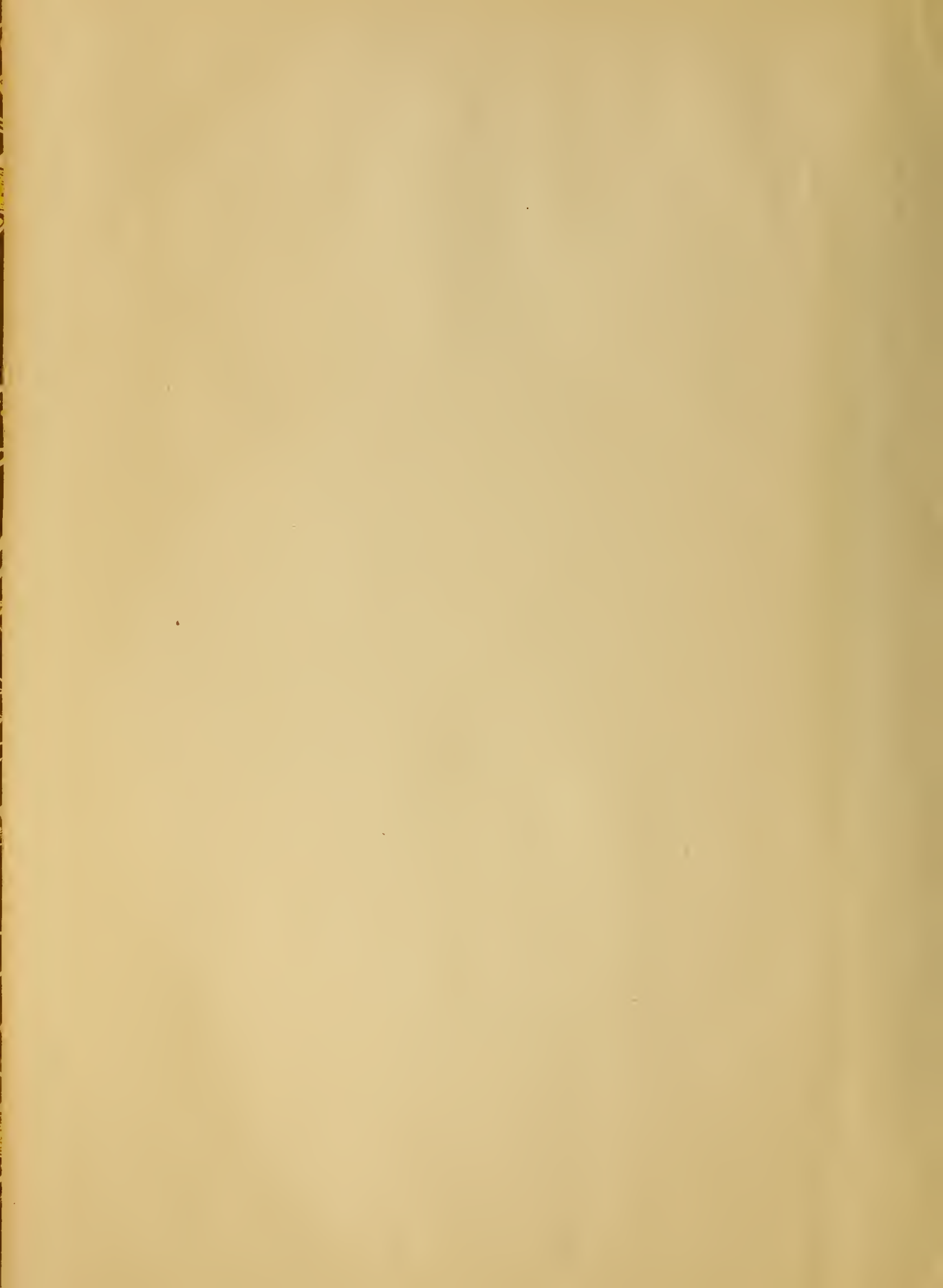


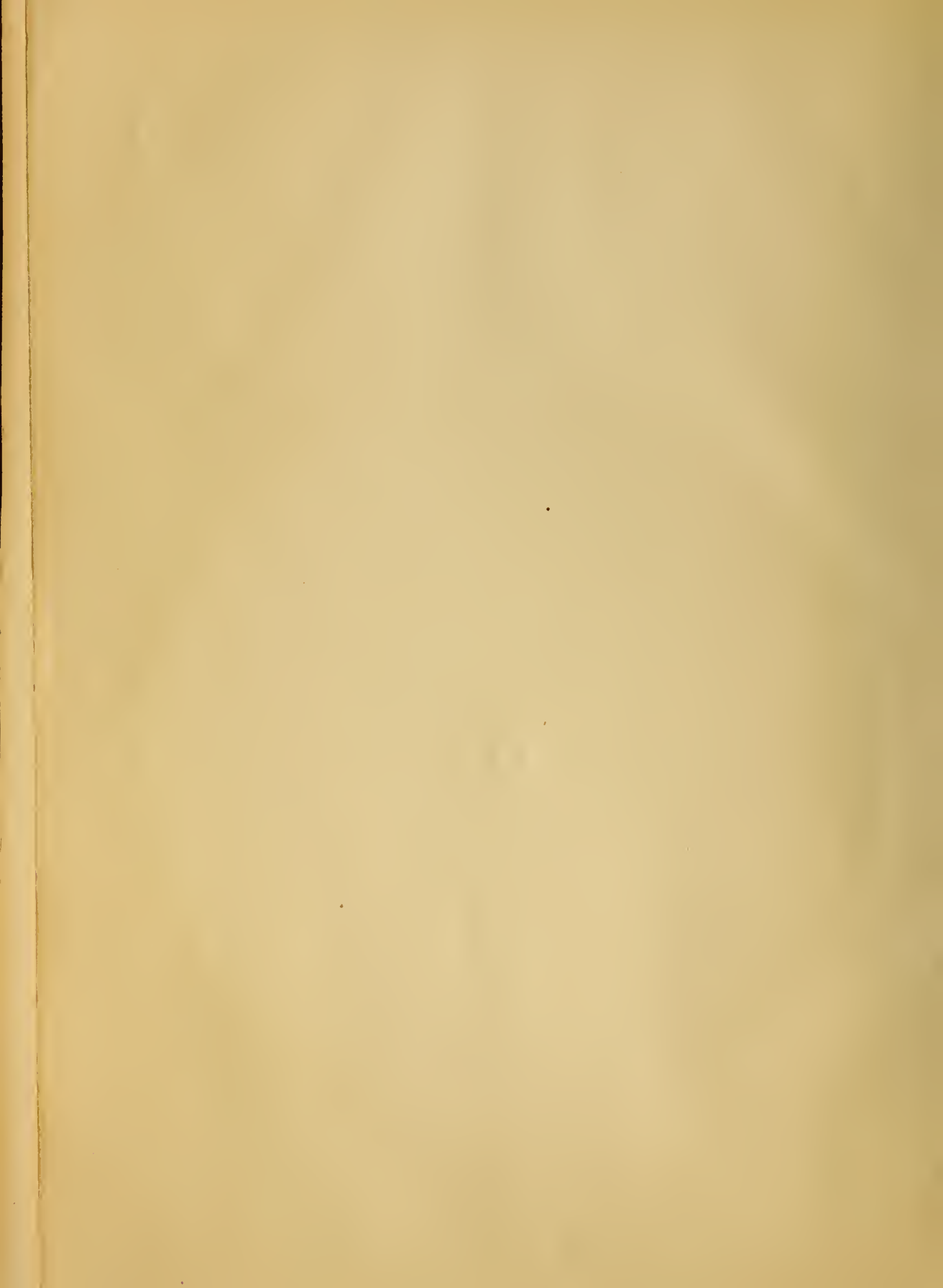
MISCELLANEOUS PUBLICATIONS
OF THE
BUREAU OF STANDARDS

NOS. 84-90









3

STANDARD TIME CONVERSION CHART



(Directions for use on reverse side)

HOW TO USE STANDARD TIME CONVERSION CHART

Prepared by R. E. Gould, Associate Physicist

[Designed to be used in connection with Circular No. 280]

Knowing the standard time and longitude at any place on the earth, the corresponding standard time at any other place can be read directly from the chart. The inner circle is marked with the hours of the day, the white half for forenoon (a. m.) and black half for afternoon (p. m.), while the outer circle is marked off in degrees east and west of Greenwich. By comparing the two scales, it will be seen that the time changes one hour for every 15 degrees change of longitude.

To obtain the time at any place in relation to the time at any other place, it is necessary only to set the time on the inner circle to the longitude of the place where the time is known and to read the time indicated at the longitude of other place.

It should be noted that the 180° meridian corresponds to the international date line. In going across this line from east longitude to west longitude, a day is lost; in the other direction, a day is gained. That is, a place just east of this date line is one day later than is a place just west of this line.

There is also a change in date in passing the midnight line of the inner circle of the chart, it being a day later as one passes from before 12 midnight to after 12. In going around the chart in a counter clockwise direction, there is one date from the 180° line around to the midnight line, and another date, which is one day earlier, for the remainder of the way around the chart.

Caution.—It should be kept in mind that this ideal zoning time is not followed by certain countries, local time being used instead, and that this chart does not apply in such cases.

Example.—It is desired to know the time in Alaska, in India, in Japan, and in New Zealand when it is 9:15 a. m., March 2, in Washington, D. C.

Washington, D. C., is in the eastern time zone of the United States and takes the time of the 75th meridian west. Setting the 9 on the white half of the inner circle so that it coincides with 75° west longitude, we are ready to read off the time in the other countries. Following the outer circle until the longitude of Alaska is reached, it is found that 4 on the white half of the inner circle coincides with this line, which indicates that it is 4.15 a. m., March 2. In the same way India is found to be half-way between 7 and 8 on the black half of the inner scale, which indicates 7.30 + .15 or 7.45 p. m., March 2, as the corresponding time for India. Likewise the time indicated for Japan is 11:30 p. m., March 2. New Zealand is found coincident with 1³⁰ on the white scale, which indicates forenoon, and since we have already passed the 180° meridian the time indicated is that of the next day or 1.45 a. m., March 3.