

threatening that they were called for. Small-craft warnings were displayed on parts of the coast on the 2d, 4th, 9th, 10th, and 15th. No storms occurred without warning.

"Norther" warning was issued for Tampico, Mexico, on the afternoon of the 20th, and was justified.—*I. M. Cline.*

DENVER FORECAST DISTRICT.

Storms of considerable intensity which moved eastward from the southern Rocky Mountain Plateau on the 1st-2d, 8th-9th, and 14th-15th were attended by occasional snow in nearly all of the district except the extreme southwestern portion. The LOW of the 1st was followed by a cold wave in southern Colorado, northern New Mexico, northeastern Arizona, and southern Utah. A disturbance which appeared in western Canada on the 13th advanced slowly southward and was followed during the period from the 15th to the 17th by a HIGH from Alberta, attended by a cold wave that reached extreme southeastern New Mexico on the last-named date. Another LOW that was also followed by a cold wave on the eastern slope advanced southeastward from British Columbia during the 16th, 17th, and 18th, the cold wave extending to southeastern New Mexico by the morning of the 20th. During the last decade of the month, high pressures prevailed on the middle Rocky Mountain Plateau, with low pressures to the northward and eastward. These conditions were attended by generally fair weather in the district and by moderate temperatures on the eastern slope.

On the morning of the 1st, livestock warnings were issued for southwestern Colorado, northern New Mexico, northeastern Arizona, and southeastern Utah. At 2 p. m. of the same day, warnings of a moderate cold wave, based upon special observations, were issued for western Colorado, northern Arizona and Utah "to-night" and for north-central and north-western New Mexico "to-night and Wednesday." Warning of a moderate cold wave in northern New Mexico was repeated at 8 p. m.

Snow fell during the day of the 1st in western Colorado, northwestern New Mexico, northern Arizona, and eastern Utah and during the following night in western Colorado, north-central New Mexico and southern Utah, with the heaviest falls in extreme southwestern Colorado and northeastern Arizona. The cold-wave warnings were fully verified, except in northwestern Colorado and northern Utah.

At 8 p. m. of the 3d, warnings of a severe cold wave were issued for southeastern Colorado and eastern New Mexico, and warnings of a moderate cold wave were extended to extreme southeastern New Mexico on the morning of the 4th. The warning was verified in southeastern Colorado and that portion of New Mexico east of the mountains.

Warnings of a moderate cold wave in eastern Colorado "during the next 24 hours" were issued at 2 p. m. of the 15th and were repeated at 8 p. m. of the same date. The warnings were completely verified.

At 8 a. m. of the 16th, severe cold-wave warnings and livestock warnings were issued for eastern Colorado and northeastern New Mexico. Snow occurred during the same day in central and eastern Colorado and extended to extreme northeastern New Mexico during the night. The cold-wave warnings were verified in eastern Colorado and that portion of northeastern New Mexico east of the mountains.

A warning of a cold wave that failed of verification was issued for extreme southeastern New Mexico at 8 p. m. of the 16th. The failure was due to the fact that an expected rapid increase in pressure did not occur in the southeastern portion of the forecast district.

Warnings of a severe cold wave "to-night and Saturday" and livestock warnings for eastern Colorado, with warnings of a moderate cold wave for extreme northeastern New Mexico, were issued at 8 a. m. of the 18th. Severe cold-wave warnings for eastern and central Colorado, with warnings of a moderate cold wave for extreme northeastern New Mexico, were repeated on the evening of the same date. Light snow fell in eastern Colorado during the following night and the next day, with a fall in temperature throughout all of the territory specified that was amply sufficient to justify the forecasts.

On the morning of the 19th, warnings were distributed of a severe cold wave in southeastern Colorado and of a moderate cold wave in extreme eastern New Mexico. The warning was completely verified.

Local cold waves for which no warning was issued occurred at Durango on the morning of the 10th and at Flagstaff on the morning of the 17th.

Forecasts of freezing temperatures were issued for south-central and southeastern Arizona on the 2d, 4th, and 19th; for south-central Arizona on the 13th, 15th, and 17th, and for southeastern Arizona on the 9th. The warnings were generally verified.

Frost warnings for Arizona were issued as follows: 1st, 3d, and 9th, heavy in south portion; 2d, 4th, 17th, and 19th, heavy in extreme southwestern portion; 5th and 11th, frost south-central portion; 12th, heavy in south-central portion; 13th frost extreme southwestern portion; 14th and 16th, heavy frost in south-central and southwest portion; 15th, heavy in southwest portion; 18th, frost in south-central portion; 23d, 24th, 25th, and 26th, frost in southwestern portion. The warnings were verified as a rule by the occurrence of frost or temperatures at which frost might be expected.—*J. M. Sherier.*

SAN FRANCISCO FORECAST DISTRICT.

The controlling factors of the weather over the Pacific slope during January, 1924, were the persistence of an area of high pressure over the intermountain region while the pressure remained comparatively low over British Columbia and Alberta. This pressure distribution favored the passage inland of storms from the north Pacific at a high latitude, and is the typical condition to cause dry weather over the central and southern portions of the Pacific coast.

Warnings of severe frosts in California were issued 17 times, and while some damage was done to citrus fruit and vegetables, no damaging frost occurred without warnings.

Storm warnings were ordered as follows: Southeast warnings from Tatoosh to Point Reyes on the 2d; south-east warnings from Eureka to Point Reyes on the 25th; southwest warnings at Washington coast stations on the 26th; southwest warnings at all stations from Point Reyes north on the 27th; southwest warnings Washington and Oregon stations on the 29th; warnings changed to southeast at Washington and Oregon stations on the 30th; southeast warnings continued at Washington and Oregon stations on the 31st. The warnings were mostly verified and from gales reported a short distance at sea all are believed to have been justified.—*G. H. Willson.*