on the following two days was giving southeasterly to
northwesterly gales of force 9 near the 40th parallel and
between meridians 150° and 160° east. The lowest ob-
served pressure in connection with the disturbance was
29.38 inches recorded on board the British S. S. Robert
Dollar, in 30° 52' N., 150° 59' E., near midnight of the
24th. This cyclone seems to have moved into the Aleu-
tian area and thence into the Gulf of Alaska, where it
remained practically stationary during the last three or
four days of June.

The following vessels reported waterspouts:
American S. S. Enslow City:
June 6, 2 p.m. Passed a waterspout in latitude 11° 43' N.,
longitude 90° 30' W., traveling from SW. to NE. Dark rain
clouds overhead.

American S. S. President Jefferson:
June 30, 8 a.m. (civil date). In latitude 37° 12' N., longitude
144° 30' E., sighted a large waterspout about 400 feet high, last-
ing about 10 minutes. Wind calm at the time; weather occa-
sionally squally; sea smooth.

SOUTHWEST MONSOON IN ARABIAN SEA; GALES IN
SOUTH PACIFIC OCEAN

By Albert J. McCurdy, Jr.

Gales in the Arabian Sea during the period June 9–23
as reported by vessels traversing shipping routes in that
region point to a strong development of the southwest
monsoon.

During this period the American steamships William
Penn, Anniston and Standard Arrow encountered mod-
erate to fresh gales.

The William Penn, Capt. R. H. Wright, proceeding
from Singapore toward Karachi, on the 9th encountered
a moderate southwesterly gale accompanied by rough
seas. Mr. J. E. King, second officer, reports that the
lowest pressure observed was 29.71 inches, at 5.37 p.m.,
in 5° 43' N., 84° 15' E. The wind at the time was SW.,
force 6, later increasing to force 7. Similar conditions
prevailed throughout the 10th.

On the 10th the Anniston City, Capt. H. Doyle, pro-
ceeding from Calcutta to Boston, via Colombo, encoun-
tered a southwesterly gale in 6° 31' N., 86° 10' E. Mr.
W. J. Mullaney, third officer, states that the lowest
barometer, 29.55 inches, was recorded at 11 a.m., on the
10th. The wind at this time was W., force 7, later
shifting to SW., and increasing to a fresh gale that lasted
until noon of the 12th. Almost identical conditions
were experienced on the 22d and 23d in 12° 40' N.,
55° 57' E.

From the 11th to 17th the Standard Arrow, Capt. J. C.
Harding, proceeding from Callcutta to Port Said, steadily
experienced southwesterly winds of force 7 to 8, accom-
panied by rough seas. The observer, Mr. W. Townsend,
reports that the barometer was steady during this period,
ranging between 29.72 and 29.83 inches.

The first gale in the South Pacific was associated with
a disturbance off the coast of Chili that appeared on June 9
and until the 12th occasioned moderate to whole gales
with high seas. The Danzig S. S. Gedania, Capt. T.
Schroeder, bound for San Pedro from Campana (southern
Chili), came within its influence on the 9th. Mr. F.
Hesse, third officer, reports that the lowest pressure
observed was 29.37 inches (uncorrected), occurring at
noon on the 9th in 44° 54' S., 80° 48' W. The wind at
this time was W. by S., force 10. Rough weather con-
tinued through the 11th.

A report of the second gale in the South Pacific was
received from the British S. S. Tahiti, Capt. R. C.
Showman, bound from Sydney to Wellington. The
observer, Mr. S. Hodson, states that a fresh gale began
at 10 p.m., on the 20th accompanied by frequent heavy
rain squalls. The lowest barometer recorded was 30.01
inches, this occurring at 10.42 p.m., in 37° 04' S., 160°
30' E. The wind at the time was SSW., force 8. This
gale lasted throughout the morning of the 21st and
during that time the wind remained steady, blowing from
the SSW.

The same vessel again encountered heavy squalls on
the 23d, while in the vicinity of New Zealand, reporting
conditions similar to those experienced in the previous
storm. The lowest pressure was 29.51 inches, occurring
on the 24th, in 41° 20' S., 174° 50' E. At this time the
wind was W., force 7. The gale ended on the 25th.
Highest force of wind 8, from SW. by W.

551.506 (73) DETAILS OF THE WEATHER IN THE UNITED STATES

GENERAL CONDITIONS

By A. J. Henry

The cool showery weather of the previous month in
northeastern United States continued through the
middle of June and even into the third week of the
month. On the whole the northeastern districts (east of
Rocky Mountains and north of Tennessee) were cool and
the remainder of the country was warm. Precipitation
was very irregularly distributed, drought in Pacific
Coast States and west of the Rockies continuing. The
usual details follow.

CYCLONES AND ANTICYCLONES

By W. P. Day

The low-pressure areas were generally characteristic of
the month of June with an increasing frequency of develop-
ment over the Rocky Mountain and Plateau regions
and central interior districts. Three of these lows
which developed over the Plateau and Rocky Mountain
regions became important storms for a day or two and
then rapidly declined in intensity.

Of the 10 high-pressure areas which seemed worthy of
charting only two were of much importance in their
effects. The first, a high of the Hudson Bay type, gave
cool easterly winds to the Northeastern States and the
Middle Atlantic States from the 9th until about the
13th; while the second, an Alberta high, pushed down
from the northwest and slowly overspread middle and
northern sections east of the Rockies with abnormally
cool weather over these regions from the 29th of June
until about the 6th of July.

FREE-AIR SUMMARY

By V. E. Jakl, Meteorologist

The average free-air conditions over the country as
determined by kites at the six aerological stations
showed throughout the range of altitude covered by the
observations, no important departures from normal.