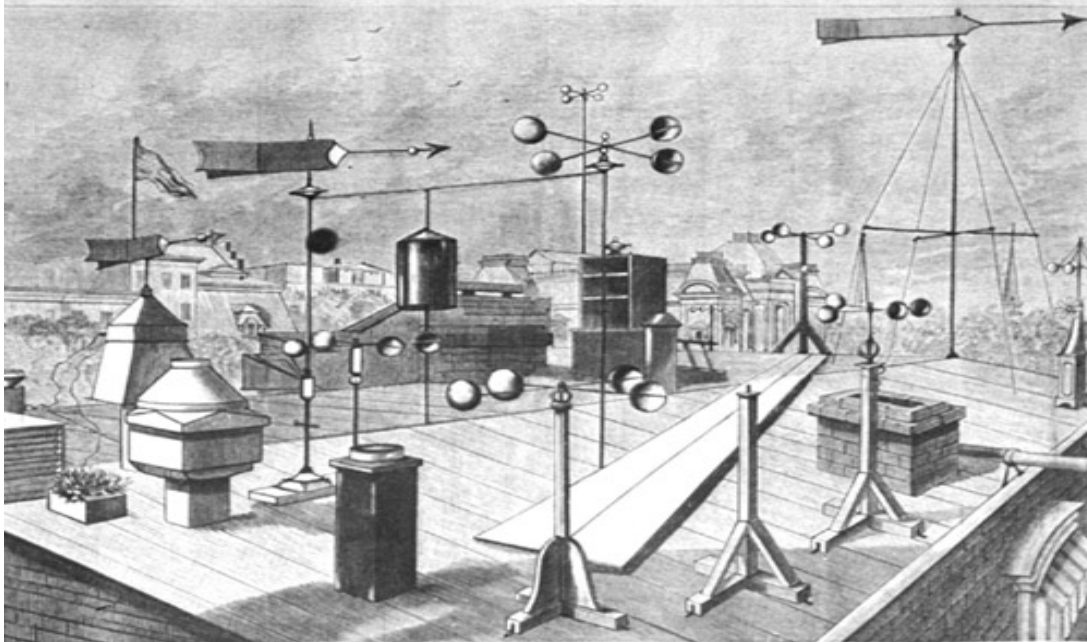


## Chapter Five:

### Weather Observing Tools



Arrangement of the wind instruments on the roof of the Headquarters Building of the Meteorological Service of the United States Signal Service. In: Frank Leslie's Illustrated Newspaper, N.Y. Supplement, May 1, 1880. Call Number M/0203 U 58m.

Only within the last six centuries has the technology of weather observation been developed. The rain gauge, barometer, anemometer, hygrometer and thermometer were all invented in the years between 1400 and 1700. These instruments, improved upon through the years, remain basic observing tools of the National Weather Service and its network of cooperative observers today. However, with the advent of the telegraph system in the 1840's, the ability of meteorologists to make weather observations from weather stations throughout the U.S. and develop near real-time maps of weather systems, and then predict the future course of observed weather.

Suddenly meteorologists were able to chart the course of weather phenomena on a near continent-wide basis. Since that time communications have improved with the development of radio and telephone, new observing systems such as radar and satellites have evolved, and ever more powerful computing systems have become available to the meteorologist.