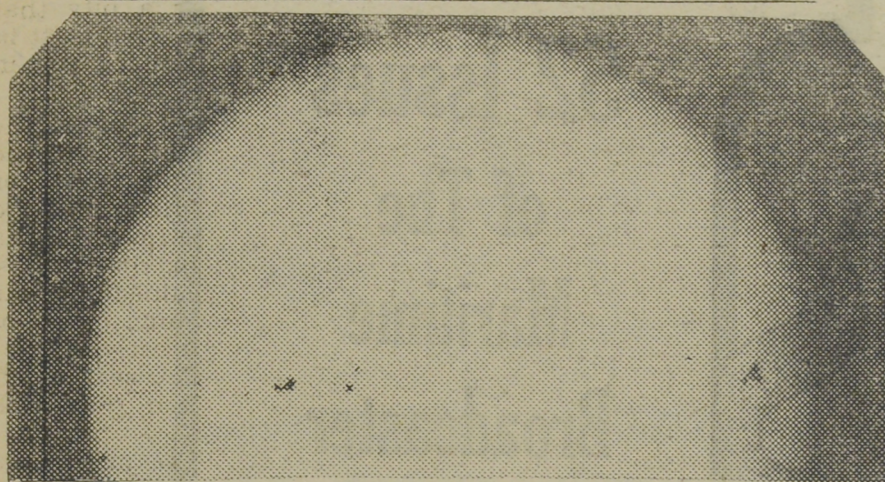
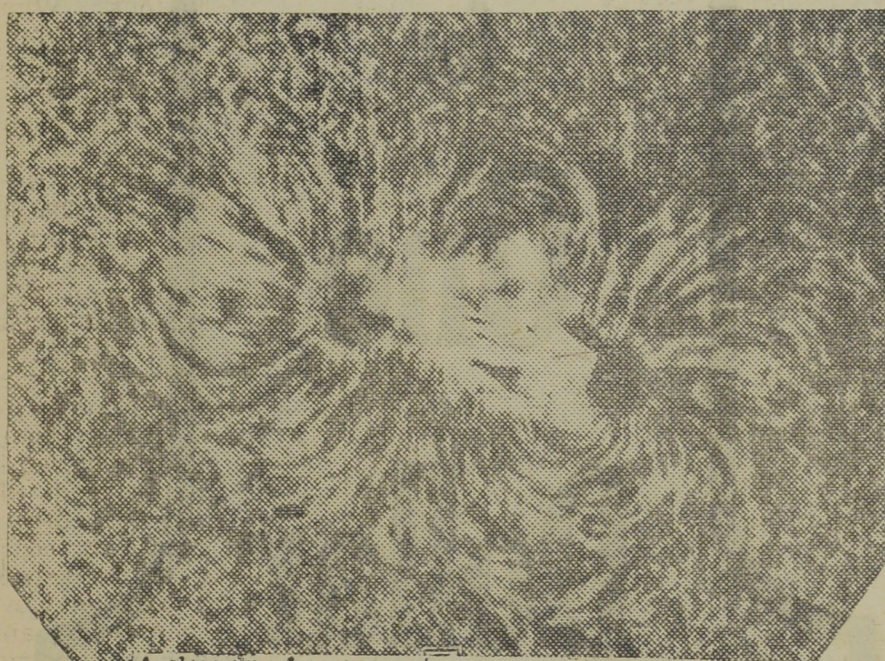


## Chinese First To Note And Record Sun Spot Activity



A section of the sun showing sun spot groups.



A close-up of a sun spot group near the polar region.

By RICHARD BAYLIS,  
Central Press Canadian Science Editor

The western world has known little of sunspot activity until recent years. In fact, Europeans, who first became cognizant of these unusual markings on the sun's surface early in the seventeenth century, did not begin to make a systematic study of these phenomena until about 100 years ago.

### Chinese Records

So we must turn toward the Orient for the first records of sun spot observation. The Chinese, first in many things, have been observing the spots for nearly 1,500 years and their ancient records show that some 95 instances of sun spot activity were noted by their men of science from the year 188 A.D. to the seventeenth century when Europeans opened their eyes.

In general a sun spot is fairly round in appearance with a dark centre, a black region, which is called the umbra, in the centre. Around this centre is a lighter region. This is called the penumbra and is marked by wavy lines flowing inward. Outside the spot the surface of the sun seems brighter than usual and heaped up. Sometimes this brighter material flows over and into the spot. Patches of this bright material are called faculae.

### Travel in Groups

These spots usually travel in

groups across the sun, sometimes remaining close together, sometimes moving away from each other at tremendous rates.

Science believes that the origin of the spot lies in some force far below the surface of the sun, so far below and distributed so widely that it acts on both hemispheres at about the same times, for spots in both northern and southern hemispheres appear almost simultaneously. The sun spot activity reaches a maximum at regular periods of about 11½ years.

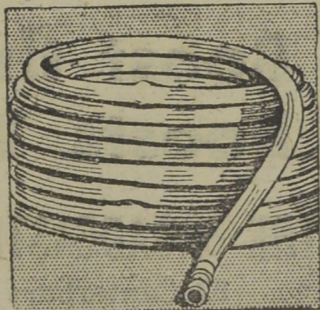
The spots are believed to be the direct cause of magnetic storms on the earth and also the activity of the aurora borealis.

### THE GOOD OLD DAYS

Eighty tankards are believed to lie buried under one of the arches of Waterloo Bridge, now being demolished. When the Waterloo Bridge was being built, eighty masons from Aberdeen were engaged on the granite work of the balustrade. Beer for the workmen was provided from a Thames-side inn, but it was not popular with the Aberdonians, who flung all the tankards into a crevice and filled it in with mortar.

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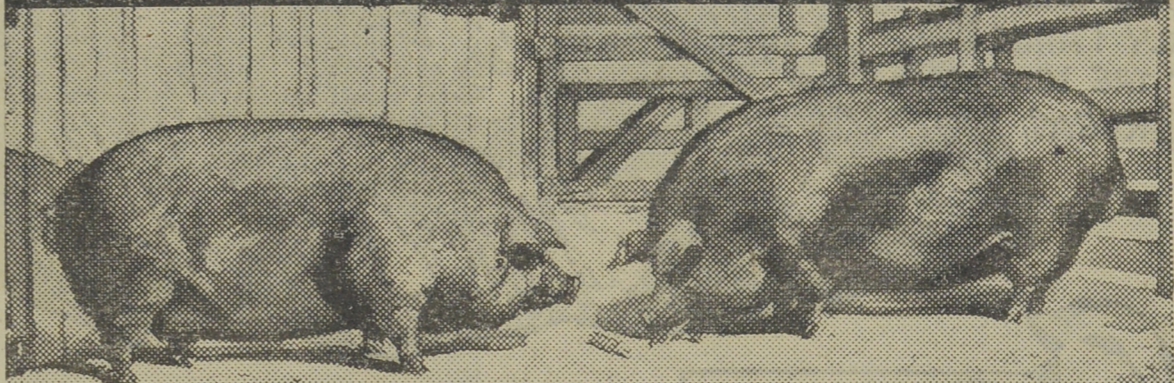
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