This is a month that will long be remembered by you, who are first observing sun-spots. Group number 46217 (see instructions for numbering) is bi-polar, it is a naked eye group, i.e., it can be seen with proper filters without any magnification as a black spot on the sun, it is over 150,000 miles in length and is about three years early because groups of this type very seldom make their appearance until about 1 1/2 to 2 years after the maximum portion of the S.S. Cycle.

If a sun-spot survives, by rotation, its passage from the east limb of the sun to the west limb, the time involved is usually from 13 to 14 days, depending upon the latitude of the group. It is possible, because of its extreme length, that group 46217 will be visible from 15 to 16 days. If an observer was fortunate enough to have observed this group on the 29th of Jan., when it was first visible on the very edge of the east limb, north belt, and will be fortunate enough to observe the most eastern portion of the group when that portion is on the west limb, he will experience the passage of a 15 to 16 day group.

Groups such as this, although not the direct cause, are usually associated with disturbances in the fields of Terrestrial Magnetism, Natural Earth Currents, and high frequency radio transmission. When groups of this type reach a point approximately 13 degrees west of the Central Solar Meridian then the maximum effect is in evidence.

The first large spot of the last cycle made its appearance in April 1934 and caused nation wide attention. The diameter of this group was 16,000 miles and was first seen by Dr. Barrie G. Linesley, assistant astronomer at Mills College and Curator in charge of the Chabot Observatory, and by Dr. Albert J. Newlin in charge of Richard Memorial Observatory at Santa Clara University.

One of our fine observers, Miss Helen Pettit, has been observing for us at Chabot Observatory since the inception of the E.D. The Preliminary Relative Sun-Spot Number of the A.A.S.C.S.O. Solar Division, for December 1945, was 27.1. You may now enter this Dec. value to the table and the bar-graph which was inserted in last month Bulletin. The mean Preliminary Relative Sun-Spot Number of the S.D. for the entire year 1945 is 33.2.

During the winter months we sometimes encounter unusual observing conditions. One observer wrote that "vibrations" were very much in evidence. What he meant was that the entire solar limb, or periphery, seemed diffused. This is generally known as the "Bubbling Effect" and may be in evidence for days at a time but not consistently. It will start faintly, last for several minutes and then gradually disappear only to come back again a little later. It is generally more severe early mornings or late afternoons. Occasionally it may prevail throughout the day. It is believed to be caused by tiny ice particles carried in the higher atmosphere by strong wind currents.

Along with this it might be well to mention that sometimes severe snow storms pass over us, which can be seen while observing the sun, where the snow will fall at a distant point in the direction that the wind is carrying it.
Two more observers have joined the ranks of Dr. J.C. Bartlett in his Solar Granulations Study. They are Mr. Paul A. Saxon of Chattanooga, Tenn. and Mr. Herbert Luft of Brasil, South America.

Dr. Bartlett has this to say, "The members of the Solar Division have been of inestimable assistance in this investigation. I have been agreeably surprised at the enthusiasm and willingness shown by all, which is in refreshing contrast to the usual attitude. It has been my experience rather consistently that people are always eager to join in anything that promises some personal publicity, but when it is discovered that genuine work is involved, then that's an end on it as Dr. Johnson would have said. Hence it is very gratifying to find real workers with genuine enthusiasm, such as my collaborators in the M.D.

Thank You—Dr. Bartlett.

There comes to mind a bit of verse that would seem appropriate here:

Set O' The Sails.
One ship sails east, another west
With the selfsame winds that blow.
'Tis the set o' the sails
And not the gales
That decides the way to go.

Like the ways of the sea are the ways of fate
As we voyage on through life.
'Tis the will o' the soul
That decides the goal
and not the calm or the strife.  Author unknown.

We regret to inform that Mr. H/B Rumrill of Berwyn, Pa., is seriously ill and is confined in a hospital. We sincerely hope that he will soon recover. Mr. Rumrill, as you know, is a member of the S.D. Committee and is an observer of long standing having observed through three sun-spot cycles. He has written much about sun-spots and is one of the country's finest delineators of them.

We are happy to report that Mr. Knox Lee of Marshall, Texas, has recovered from an illness of two months and will resume his solar observations on Feb. 1st. Here is yet another one of our enthusiasts that cannot be downed. He lost his left leg on account of his illness and now jokes about it. He sent me a sketch of what he looks like at the telescope now and asked me to exchange it for the S.D. photo. I am going to fool him and send both with the collection that soon will go around the division.

We are also extremely happy to announce that Miss Elizabeth Roemer, our observer at Alameda, California, is being sent to Washington as a candidate for the Science Service Award. We are all cheering for you Miss Roemer and send you our very best wishes.

If you are not already a member of the AAVSO please join now.

Mr. Ben C. Parmenter has written a fine article, reviewed by your chairman, on "The Pitch-Lap Supreme." Anyone interested in lens grinding should own a copy of this. It is well worthwhile. His address is 14014 -28- NE, Seattle 55, Wash. The small sum of fifty cents with your order should be sent directly to Mr. Parmenter. The charge covers printing cost only.

If you wish an application for membership in the AAVSO, write your chairman and you will receive the same.