551 · 578 · 71 (54)

A SEVERE HAILSTORM AT HYDERABAD ON 26 MARCH 1951

At 1725 IST on 26 March 1951, when I was about to go out for a walk, I saw about three fourth of the sky covered with dark thunder cloud. However, as there were no fractonimbus clouds I could not think of immediate prospect of a heavy shower. But as I walked a few yards, big drops of rain began to fall on me. I walked back. As soon as I reached home, heavy stones of hail began to drop down at a terrific rate. I had not seen hail stones of that size before. Most of them were one and half to two and half inches in diameter. The diameter of the biggest stone I measured was 21". None of smaller size than 1½" could be observed. The rapidity of their fall decreased at 1740 IST, 10 minutes after they began. At 1745 again, there was another rush of these stones but smaller in size—the average diameter being about 11". Even now there were not many of diameter less than 1". They finally stopped at 1755 IST and the rain itself stopped at 1805 IST. The sky on the west was blue but about three tenth . of the sky on the east was still covered with thunder clouds, which also disappeared in about an hour. The sky was almost clear at 1900 IST.

The stones were varied in appearance. Many of them were built of a large number of layers, the number widely varying from stone to stone—by layers I mean transparent and opaque shells of ice. In one case I could count 20 layers. There were some that contained only 3. Some were transparent lumps dotted by regions of opacity. Some were like flattened balls with a number of small opaque spheres attached to the rim. But, I could not see even a single stone which was nearly spherical, unlike in the case of ordinary hailstorms where the stones are usually of much smaller size.

It occurred to me a little late—at about 1800 IST—to measure the radii of the layers. I measured the radii instead of diameter because in some cases the common centre of the shells was not situated sym-

metrically. I made measurements on 25 stones. Unfortunately, they did not show many layers as probably those that were showing this kind of structure prominently, fell in the beginning. The following give the measurements made on four of them.

Stone No.	Layer No.	Radius (mm)
	ī	I
	2	5
	3	7
1	4	10
	5	12
	6	13
	7	14
	1	1
	2	5
2	3	7
	4	15
		I
	1	6
	2	8
	3	
3	4	10
	5	II
	6	12
	7	20
	í	I
	2	6
4	3	II
E	4	23

Most of the others had less number of layers but all of them showed the central nucleus of radius about 1 mm and a transparent spherical shell of radius about 5 mm surrounding it. They differed from one another only in the outer shells. Another common feature was that the opaque shells of ice separating the transparent layers were sharp, so that most of the ice contained in any particular stone appeared transparent.

N. RAJESWARA RAO

Nizam College, Hyderabad (Dn.) April 2, 1951.