

## • Hobby Department

FOR SUCCESS in a hobby it pays to pick the right father. N. F. Kruse (1942), vice president and technical director, Central Soya Company Inc., Decatur, Ind., has long been interested in semi-precious stones, rocks, and minerals and about 15 years ago he decided to equip a basement "rock shop" to cut and polish stones. Wood-working has also attracted his attention since he was a small boy, and it is only natural that he should imitate the skill of his cabinet-maker father and begin to shape objects as well.

He is the kind of craftsman who can work with a 16-in. diamond saw with arbor attachments, a 16-in. horizontal lap, and an 8-in. hard felt wheel with the necessary grits, polishing powders, and petrified woods—and presently come up with a pair of polished book-ends. "A novel twist to wood-working," he calls it.

He did so well with this experimental work that he devised a machine to speed up the polishing and eventually wrote an article about it for the August 1953 issue of the *Lapidary Journal*, illustrating it with two views of the polishing rig.

In the photograph on this page more of the Kruse home-made equipment may be noted, a variety of polishing units and wheels all mounted on the same work-bench. He is shown polishing a small pair of agate book-ends. In the foreground are samples of some of the finished book-ends, lamp bases, and costume jewelry which have been made from petrified wood, agates, minerals, marble, etc. Much of his prized raw material has been obtained on vacation and business trips: agates from fishing trips in Minnesota and Colorado; petrified wood from Wyoming and Washington; marble from Belgium and Italy; and dyed agate from West Germany.

Mr. Kruse describes the unit operations in fabricating semi-precious stones as cutting the raw material first by slabbing on a diamond saw of the proper size, then trimming to the approximate shape on a smaller diamond trim



saw, using cutting oil as a lubricant. Then follows wet grinding on a carborundum wheel to shape the article as desired. Saw and grinding-wheel marks are removed with a high-speed wet carborundum sander, using first a 100-grit and then a 320-grit cloth.

A fine degree of pre-polish is obtained, Mr. Kruse observes, on a dry, well-used 320-grit cloth sanding operation; the final polish is achieved by a polishing powder paste on a felt wheel. In small sets or cabs for jewelry it is necessary to fasten them to sticks with dop cement so they can properly be held for the grinding, sanding, and polishing.

What the educators call a transfer of technique surely applies to Mr. Kruse for he can use the same skills and equipment to work with plastic laminate material, say for furniture. Using the weight of the polished rocks for rigidity and combining this with the patterns found in the laminates he can make unusual combinations for lamp bases, book-ends, statuette bases, and the like.

A delight in wood-working, then a collecting enthusiasm for rocks and minerals arising from mineralogy courses have given Mr. Kruse a most satisfactory hobby. He takes much pleasure in colors, peculiar patterns, crystal formations, and physical characteristics of minerals. He can size up his material, decide on the shape, and devise or use equipment for his purpose.

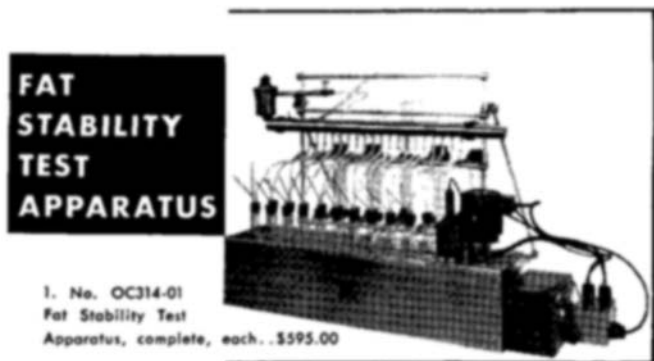
Along with skill at the work-bench has gone skill at the laboratory table, and attention to Society activities, such as committee work: refining, bleaching methods, advertising, and nomination and election. Perhaps his father picked the right son.

## • Received in the Journal Office

The May-June issue, Vol. I, No. 3, of *Ciencia Interamericana*, a bi-monthly publication of the Division de Fomento Científico, Departamento de Asuntos Culturales, Union Panamericana, Washington, D.C., features "La Ciencia Argentina en el Antártico," "Isotopos en lo Industria," and "Alejandro de Humboldt en Colombia."

The 1959 subject index, Vol. VIII, has been received from the Central Food Technological Research Institute, Mysore, India. It runs to 14 pages.

Photovolt Corporation, New York, has announced the publication of their new house organ, *Photocord*, The Photovolt Quarterly Record. The pamphlet contains articles on Photovolt's products and their applications in science and industry. Both Issue #1, January 1960, in limited quantities, and Issue #2, August 1960, are available from the Photovolt Corporation, 95 Madison avenue, New York 16, N.Y.



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