next stage baked next in order, gradually increasing the temperature of the ovens for each successive stage.

Experiment two is always interesting, as the students find that it is not necessary to increase the amount of baking powder for a cheap powder, such as "K. C.," over the amount of an expensive powder, such as "Royal," if each is properly baked; and also that such an increase in amount leaves an unpleasant taste and large gas holes full of air, not food material. They are also surprised to find that a very good product, of even, tender texture can be produced with less baking powder than most recipes state.

TESTING MARKET VALUES IN COFFEE.

BY GEORGIA FINLEY,

University of Indiana.

A test which could be carried out in high school or college with interesting results, was performed in the kitchen laboratory of Lewis Institute, Chicago, with different grades of "blended" and "straight" coffees, bought on the market as the ordinary homemaker would buy for her own consumption. The purpose of the experiment was to ascertain whether the extra price paid for the so-called better grades of coffee, justified the difference in expense from the housekeeper's standpoint of color, strength, and flavor.

Eleven samples ($\frac{1}{4}$ lb. each) were bought from retail stores; they were a fair representation of the different grades of coffee then on the market in that locality. Each sample was labeled by the merchants when purchased, consequently no mistake could be made as to brand or price. The coffee was ground to a fine powder, pulverized in a hand mill. Each sample was tested in cold water before grinding to determine whether the coffee contained an adulterant. The brands were numbered, thus concealing the brand and price from the testers. Two level tablespoons were put into a closely woven muslin cloth stretched over an ordinary coffee cup and 1 cup of boiling water was allowed to drip through once. The cups were numbered to correspond with the numbers of the brands. As soon as the water had percolated through, the extractions were tested for color, strength, and flavor. As the testers were ignorant of the grade of coffee in the various cups, they were entirely dependent upon their individual taste for the decisions. The color was designated as dark,

medium, or light; the strength as strong, mild or weak; the flavor, as agreeable or disagreeable, with specification as to whether it was *aromatic*, *bitter*, a distinct blending of recognized flavors or undetermined. (One might, of course, add many other descriptive adjectives, as, *raw*, *over-caramelized*, *metallic*, *insipid*, etc.)

The results seemed to justify the conclusion that the "choicest Santos, straight" of one dealer, at 25 cents, proved as acceptable to the majority of the seven testers, as did the "choicest Santos, blended with Bogota, and Mandheling Java," at 40 cents, of another dealer; and similarly with some of the other samples. Only one of the testers considered the flavor of the vacuum coffee as equal to that of the other samples; yet this is a vacuum-roasted coffee at 50 cents, prepared by a special process known as the steel-cut process, in which the chaff is blown out of the coffee and a part of the caffeine is claimed to have been removed. It was the highest priced coffee then on the market in that locality; but judging from flavor, would not seem to justify the price paid for the special process of manufacture.

THE BED, ITS EQUIPMENT AND CARE.¹

BY MINNA C. DENTON,

Ohio State University.

(This series is offered as a contribution of material suitable for courses in House Decoration and Furnishing, Home Nursing, Household Management, Home Sanitation, or Housewifery. Lack of school equipment need not prove an insurmountable obstacle; it is usually possible to borrow for the occasion, from private homes or from shops, most of the material needed.)

V. Springs. Box, woven wire (single or double), link, ribbon and spiral, etc.; reinforcements—interwoven at various intervals, supporting spirals, lateral frame, etc. Compare as to comfort of sleeper; ease of handling, moving and cleaning; durability, liability to sag, cost. Consider various substitutes for springs (rope-net, canvas) if desirable to do so. Consider expedient of placing heavy ticking or soft paper over springs, to catch lint from mattress, and to save wear on it.

NOTE: "Sag" in springs and mattress is a matter not only of comfort but also of hygiene. Sagging materials give way most

¹The first four topics in this series were outlined in October SCHOOL SCIENCE AND MATHEMATICS. Continuation in future numbers.