humor) in the alphabet comes before V (in the vitreous humor of the posterior chamber).

The initial letters of the three meninges of the central nervous system, *P*ia Mater, *A*rachnoid, *D*ura Mater named in their correct order from the inside out, spell PAD which also explains in part their function.

The names of the twelve Cranial nerves of mammals can be recalled from the jingle—

"*O*n *O*ld *O*lympus' *T*ipmost *T*op,
*A F*inn *A*nd *G*erman *P*icked *A H*op."[4]

The correct order of the categories used in biological classification (Taxonomy), which is difficult to appreciate and hard to remember when first met, offers no hardships even to a secondary pupil when the initial letters in their correct order are combined into the sentence—

"*S*ome *G*ood *F*olks *O*rder *C*hicken *P*ie," hence the correct taxonomic order, *S*pecies *G*enus *F*amily *O*rder *C*lass *P*hylum.

Thirteen essential elements in protoplasm are easily recalled when their symbols are arranged as follows—

C, H, O, P, K, I, N, S, Ca, Fe, Mg, Na, Cl;
"C. Hopkins' Cafe mighty good—
(if taken with a grain of salt)."

USING JINGLES. Almost everyone has at some time or other whispered to himself:

"I before E except after C,"

but few know subsequent helpful lines, two of which are—

"And in words such as Weigh,
"Where they both sound like A."

Most of us recall the number of days in any month by the well known

"Thirty days hath September. . . ."

[4] These nerves are: Olfactory, Optic, Oculomotor, Trochlear, Trigeminus, Abducens, Facial, Auditory, Glossopharyngeal, Pneumogastric (Vagus), Accessory, and Hypoglossal.

Rhymes and jingles have the disadvantage of being sometimes misleading, as is evidenced by the man weak in Anatomy who on first meeting a Mr. Gummick, decided that the name rhymed with "stomach," yet greeted that gentleman some time later as Mr. Kelly. Thus, even the best tools may fail occasionally.

These few examples are given here to indicate that there are great possibilities for teachers with vision. The questions of the choice of the subject in our science courses and the background, interest, and future of our pupils are urgent. But facing the facts as they are, we must meet the challenge with imagination, and so vitalize our teaching that we help our pupils to recall more and more of the valuable things to which we are exposing them. Thus perhaps we may make our science teaching bear more fruit. We can; and we must; for as Emerson wrote, "The man who can make hard things easy is the real educator."

PERMANENT METAL LABELS

At Chicago Teachers College partially labelled demonstrations, especially of muscles, have been used in vertebrate anatomy to help students establish landmarks. These labels have been made with pencil or ink letters on small common cardboard tags which were then dipped into melted paraffin to coat them. The chief criticism is that of disintegration with use, particularly if subjected to moisture. Plastics in solution have also been used to cover the tags but the result is not entirely satisfactory, because of disintegration, discoloration, and finally, the necessity for making several successive applications, which is tedious. Even metal rimmed tags were

not without disadvantages, one being the electrolytic reaction with the lining of the copper wash boilers used for storage. Wooden tree-labels proved to be cumbrous, and the copper wire discolored the specimens.

Metal markers have been substituted. Several trials of different methods of making these were utilized. Thin sheets of soft metal were imprinted in a typewriter with the ribbon removed. This is rapid and has been done with both copper and aluminum. However, the thin strips bend out of shape with handling, and the clarity of the letters has been criticized. Stylus writing on thin metal was more legible. Letter dies of various sizes give sharp cleanly cut words and heavy gauges of metal may be used for the tag, but the process of stamping one letter at a time by hand is very slow. Specifications of die stamping machines were examined but the purchase of such a machine appeared to be an unjustified expenditure considering the infrequent use it might receive. Other methods were considered and rejected for one reason or another.

A Chicago firm (Denoyer-Geppert Co.) has experimented with our suggestion and has produced metal labels which are excellent. The words are clearly stamped on resistant metal and the letters are filled in with white lacquer. They are very legible and have withstood tests in preservatives. A set of standardized labels could be made for any laboratory animal and used over and over, or a generalized list might serve for any of several animals. A metal tag with square ends with one hole and stamped lacquered letters costs ten cents each (minimum order $2.00) or $4.50 for fifty, while another label with rounded ends and smoothed edges with a hole at either end sells for 20 cents each or $9.50 for a set of fifty.

These metal tags may be used for identifying museum specimens, laboratory displays, preserved material in collections where species are mixed, for marking animals collected in the field, for student guidance in demonstration dissections, for practical examinations, for class reviews. Tried as well as probable uses point to this as a method which is flexible and thus adaptable under many circumstances.

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GIANT CHROMOSOMES

It is often difficult to demonstrate convincingly to the average Biology class just how chromosomes split longitudinally during mitosis. The teacher of Biology must frequently wish that he had some giant chromosomes with which he could demonstrate this phase of cell division. Good charts or models, if available, will be very helpful, but experience has shown that the following simple method is much more effective. The main reason for its success lies in the fact that charts and models are stationary things which do not move, whereas this method actually performs the act of tearing apart the giant chromosome model. The