with feeding. By the proper arrangement of such stimuli it may be possible to elicit greater than normal eating behavior.

b. Are there stimuli which innately elicit eating responses? Two possibilities occur off-hand: rattling sounds such as grain falling on a resonating surface, and movement of the feed such as bouncing or scattering grain. Perhaps such movement might elicit the natural pursuit responses, as when a chicken chases a grasshopper. Would this increase eating responses? These two types of stimuli could be easily arranged by means of an elevated hopper which dropped the feed onto an inclined board whence it would fall into the eating trough.

5. Presentation of one type of food contingent upon eating another type of food. What would happen if a chicken were required to eat a pellet (or two) of mash in order to get a piece of grain?

C. Properties of the chicken. What makes a chicken cease eating? This is perhaps a more cogent question than "Why does the chicken start eating?" for if a set of conditions can be found which will postpone the "cease-eating stimulation," the chicken may consume more feed in the usual eating situation.

As we know, a chicken may fill its crop and cease eating in a few minutes. Since it is unlikely that the digestion could have progressed far enough in this time to change the basic physiological condition of the body, the "cut-off" mechanism must be associated with the state of the crop after feeding. There are experimental studies of the pigeon showing that the crop behaves (in a motivating sense) like the human stomach in that it exhibits rhythmical contractions beginning 30 to 45 minutes after feeding and increasing in frequency up to 6 hours. Filling the crop causes cessation of contractions in the part filled but not in the unfilled part.[2] Contractions of the human stomach have been shown to be correlated with hunger pangs.[3] The inhibitions of eating responses arising from a full crop might result from several conditions:

1. Pressure caused by feed,
2. Weight of crop contents,
3. Chemical action of food on the walls of the crop.

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[2] Warden, C. J., Jenkins, T. N., Warner, L. H., Comparative Psychology, Vol. III., p. 207-208.

[3] Wada, T., Arch. Psychol., 1922, no. 57.