

graduated periods of vigorous effort and rest which follow each other in fairly rapid succession.

This study sought to eliminate subjects suffering from ill health, and to provide approved hygienic surroundings for participants in the tests. The presence of illness or disease, or exercise in an unhealthful environment, encourages the production of fatigue materials in the worker, and adds complex factors which are not to be considered in this report. It is assumed that vigorous physical activity, like the playing of basketball, will be limited to those in good health. Treatment and care of those unsound in body are the responsibilities of experts in the medical and allied fields. It has been pointed out that most of the examples of players damaged by school athletics involve persons whose health was poor at the time of participation, and who should have been on the sidelines or in bed.

The supervisor of hard work and the coach of athletic teams, however, must assume some responsibilities in the fields of health and hygiene. Proper administration of the activity requires the elimination of the ill by thorough medical and physical examinations given by qualified experts. In addition, the coach or supervisor should see that the surroundings are healthful and that such environmental influences as temperature, lighting, ventilation, and sanitation meet high hygienic standards.

Purpose and Construction of a Fatigue Curve

A fatigue curve of performance is simply a graphic representation showing accurate comparisons of the amounts of work done in a succession of work periods of prescribed duration. The curve is a pictorial method of presenting for easier interpretation the scoring data compiled in a series of tests, and is commonly used in statistical studies.

Such a curve could be plotted, for instance, by counting the number of bricks thrown from a wagon in a series of work periods of uniform length and conditions. The subject, we will say, is charged with throwing out single bricks as fast as possible for ten seconds; then rest for ten seconds; and repeat throwing and resting for ten consecutive periods or innings. With conditions established which require the same effort on each throw, and assuming the worker puts forth maximum effort during each period, the develop-