

such rapid advances in the past to appreciate the future conquests when our water powers are fully developed.

To intending purchasers of electric equipments, a number of considerations may be presented, as the customer, not always having the advantage of special knowledge or experience, may lack time and facilities for testing out before purchase; and works managers and superintendents may be in doubt as to the paying value or comparative merits of the machines and devices drawn to their attention by enterprising supply houses.

We might say first, that the motor should be of general adaptability. This is most important, as it largely governs the selection. It should be maintained and operated at low cost.

As is usually the case, the simplest and most compact motor, of light weight and of few parts, is at once the most adaptable, and easiest to maintain. Fewness of parts calls for less material. What is here said of manufacturing costs applies equally to repair expense; with fewer parts there is less liability for wear, for lost motion, for breakage; there are fewer "extra" pieces to carry in stock, and there is increased time service. The strongest motor is not the heaviest; the most powerful is not the largest.

In conclusion, the electric drive, whether individual or group, from present successful installations, greatly increases the general reliability of the plant.