From above extracts we have one cu. ft. of wet peat equais 50 lbs., yielding  $13\frac{1}{2}$  lbs. of dry peat, or one cu. yd. yields 337 lbs. of dry fuel, and one acre 272 tons, taken one foot deep, or 1,089 tons per 4 ft. in depth. If 120 cu. ft. yield a ton of dry fuel then we have 362 tons per acre taken one foot deep or 1,442 per 4 feet. The shrinkage in weight according to these figures is from  $66\frac{2}{3}$  to 75 per cent., and the yield  $33\frac{1}{3}$  and 25 per cent.

By reference to the article, "Cutting Peat by Hand in Hanover," we find Schroeder's experience shewed a yield of but 10 per cent.

Mr. Panton says that a cu. yd. of wet peat from the Welland bog would give 250 lbs. which at 55 lbs. (supposed) to the wet cu. ft. indicates 17 per cent.

WEIGHT OF DRY PEAT:—By measurement on dry crude slaned peat from the Welland bog, the bulk of one ton of dry fuel was found to be, when packed closely in a box, go cubic feet (600 lbs. to the cu. yd). By another measurement, on puddled peat loosely thrown in a box, the same figure was obtained. Another set of measurements shewed: I cubic foot dry crude puddled peat to equal 22 lbs.; I cubic foot dry powdered peat, 24 lbs., or 594 and 648 lbs. to the cu. yd. respectively.

A dry yard of peat from the Ellice bog, north of Stratford, weighed 660 lbs.

"The weight of a cubic yard of various kinds of air-dried peat is, according to Sir Robert Kane, as follows: light peat, so much used for domestic fuel, about 500 lbs.; good peat, packed close in the form of sods, about 900 lbs.; and the densest peat, well packed, as much as 1,100 lbs.

"Other statements concerning the weight of air-dried peat are as follows: the weight of a cubic metre of air-dried peat varies from 250 kilograms (423 lbs. to the cubic yard) for mossy peat to 450 (763 lbs. to the cubic yard) for the blackest kind."—*Percy's Metallurgy*.

CALCULATIONS on the size of cut required to yield one month's supply (1,250 tons). One acre yields 250 tons taken one foot deep.

Let the cut be 12 feet wide and 3 feet deep. Then the length to yield 1,250 tons would be 6,050 feet, and for spreading ground we require a strip on each side, 33 feet in width (total 66), if peats are 8 in. thick and if 3 ft. berme and 10 per cent. for interstices is allowed.

CUTTING AND SPREADING:—Leavitt in "Facts about Peat," page 33, states that a man can cut 25 or more blocks of peat weighing 15 pounds each, in a minute when working "by the job" he will cut 20-22; and when working "by the day" he does cut 15 or more.

The latter figures give  $67\frac{1}{2}$  tons per day; Leavitt offers 50 as a conservative estimate. If it takes two men to spread what one man cuts, (considering that the peats have to be wholeled a certain distance when large quantities are required) then we have at least 16 tons of wet peat (making at least 4 tons of dry peat) per man per day.

A. M. P., experimenting in the Welland bog, allows  $2\frac{1}{4}$  dry tons per man when two men work together, one cutting and one spreading; but in this bog there are roots to be contended with, from which many bogs are free. If we allow another man spreading, this must be reduced to  $1\frac{1}{2}$  tons per man per day.

Leavitt, page 40, quotes B. H. Paul as follows: "Two men working together, one cutting and one casting, will in good weather get through what is the equivalent to ten tons of dry peat." If we say three men, on account of the distance to spread, we have  $3\frac{1}{3}$  tons per man. The same author, page 36, quotes Prof. Johnson with reference to Brosowsky's peat cutting machine, as follows:

"Four hands will cut and lay out to dry 12,000 to 14,000 peats daily or 3,100 cu. it."

Which means  $77\frac{1}{2}$  tons, estimating 50 lbs. to the cu. ft., or  $19\frac{1}{2}$  tons of wet or nearly 5 tons of dry peat per day per man, or adding 2 helpers,  $3\frac{1}{3}$  tons. If the number of tons that a man can take out and spread when 3 work together may be estimated at from  $1\frac{1}{2}$