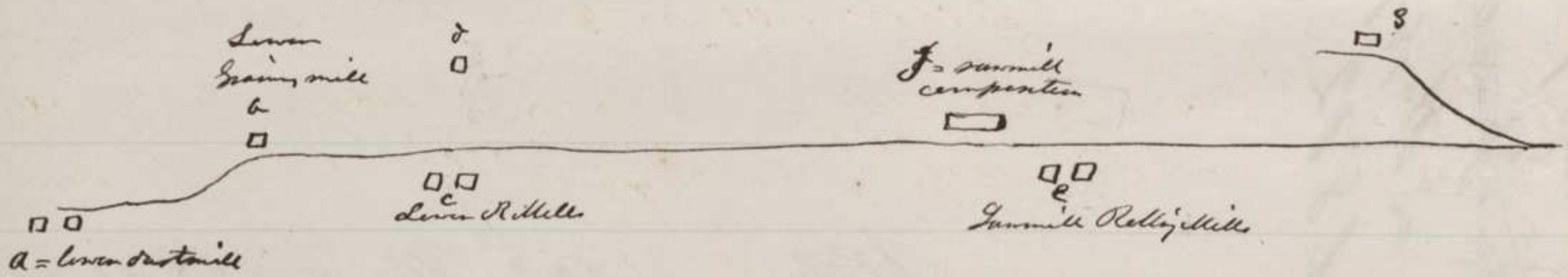


# Transportation In Hasley yard



$ac = 462$  yards       $cf = 237$  yards       $fg = 320$  yards  
 $cd = 60$  yards       $fe = 30$  yards       $ed = 267$  yards

Now the work done in transportation is equal to the distance multiplied by the weight moved.

Let us calculate how many yards one pound of soda powder is moved in Hasley per day by the present plan and how many by a different plan.

As the distance the materials have to be moved from Refining to Sawmill compartment is equal in both cases we will omit this - and also from <sup>Press to</sup> Grain mill to Glaze & Dryhouse Packinghouse and May being also the same in both plans - but will omit it, and only consider from the sawmill comp. to the Press

The present mode is to take coal out and Soda from the sawmill to the lever out mill <sup>a to f</sup> or 400 yards enough stuff to make 4 changes of 6 barrels or 7040 lbs then retransport it from Lever out mill to compartment <sup>a to g</sup> or 720 yards 7040 lbs then from compartment <sup>g to e</sup> to Sawmill Rolling Mills with 3% of water or 350 yards 7320 lbs

then from Rolling mills to Lever Press 267 yards 7200 lbs - <sup>total of raw</sup> stuff 5400 lbs from compartment to Lever Rolling mill and thence to press 300 yards

or say 7000 tons 1 yard per day

$400 \times 7040$	$= 2,816,000$
$720 \times 7040$	$= 5,068,800$
$350 \times 7320$	$= 2,562,000$
$267 \times 7200$	$= 1,922,400$
$300 \times 5400$	$= 1,620,000$
	<hr/>
	13,989,200

Now if the ~~charges~~ of a dustmill were taken directly to the lower  
 most block of Rolling mills and run in one Mill after them  
 to the Press and five of the lower mills with the sawmill block  
 put on new arrangements we would have the transportation as follows

Camp to Dustmill	400 x 7040 =	2,816,000
Dustmill to Rolling	162 x 7040	1,140,480
Rolling Mill to Press	60 x 7020	421,200

Raw Camp for 1 Rollingmill	300 x 2700	810,000
	300 x 3600	1,080,000
	<u>2,500</u>	<u>6,267,680</u>

But this yields 900 lbs of Powder more per day than old plan here we  
 must subtract from above 213 tons 1/2 and have for equal  
 work 29.20 Tons one yard against 7000 Tons 1 yard  
 or for every day of Good powder made by old plan  
 one ton has to be moved 14 yards and by the  
 New plan 6 1/2 yards nearly

for the purpose  
 we can expect the benefit for a 1/2 ton of powder, which  
 will be shipped to Washington, and the result  
 would be as follows

Memorandum of  
 Genl of the Ordnance  
 of Powder at Dept  
 March 1872  
 Wm. G. Adams Esq  
 Dear Sir  
 I have the honor to acknowledge the receipt of your letter of the 18th inst. in relation to the proposed change in the mode of transporting powder from the mill to the press, and in reply to inform you that the same has been referred to the Board of Ordnance and is now under consideration.

Wm. G. Adams Esq  
 18th March 1872