Wool card for finishing	1,100 00
One boiling iron vat	150 00
Six wooden vats	300 00
	$3,230 00

"The recent advance in the price of chemicals has raised the cost of production.

"I adopt the Claussen process, having purchased the right for the use of his patent for the United States, having practically experimented upon it, and fully demonstrated the most favourable results. In 1854 I commenced manufacturing flax cotton at Rocky Hill, New Jersey, and produced a sufficient quantity on a commercial scale to induce a number of gentlemen to form an organized company, with a capital of $200,000; but from the low price of cotton and wool at that time, and the unfavorable state of the money market, and the prostration of the manufacturing interest, and from the prejudices of manufacturers to use a new staple, they became discouraged, and from some of the shareholders not paying their full instalments of shares, the company disposed of their property after having produced about ten tons of flax cotton. Most of it was purchased by Messrs. Lawrence & Stone for their manufactory at Lowell.

"I can prove from practical experience that flax and hemp can be converted into a fibre stronger than cotton or wool, and capable of taking better color than either; can be spun and wove on the existing cotton and woollen machinery at a cost below cotton or wool at any time, there being less waste. It will mix and felt with wool, having had it mixed with wool and made into cloth and hats, and I had them worn in my family and found them much more durable than all-wool.

"There has been a great deal of prejudice against some portions of Claussen's process totally unfounded and misconceived. For instance, that it was not suitable for making long flax, but rather that *all*, long and short, indiscriminately, was converted into flax cotton; the fact is the reverse. No doubt the flax cotton is the greatest novelty, a new article of commerce, and so becomes the most prominent feature in the various inventions. The long flax, however, through Claussen's process, is produced in better condition than as at present for the manufacturer, and what is indifferent and not sufficiently well grown for long flax is quite suitable for, and is converted into, flax-cotton, also common tow, and such like stuff. By this process the flax, instead of being pulled in a green state, is allowed to ripen the seed, and can be cut with a mowing machine. The farmer by this means saves the great expense of pulling, and has the seed, which alone pays for raising the crop, and by breaking the straw with a hand machine, such as Sanford & Mallory's, he can return to the land nearly one-half the weight as manure. The shives contain silica, and by feeding his cattle the refuse seed and bolls, he also obtains a rich manure. In 1854 I had an agent in Washington exhibiting specimens showing the whole of Claussen's process, from the flax straw to the finished cotton, linen, and woollen fabrics, in a bleached, unbleached and dyed state.

Yours respectfully, H. McFarlane.

FOURTH SUBDIVISION, OR MANUFACTURING STAGE.

"A leading object of the appropriation having been to test the practicability of substituting the fibres of flax for cotton, on cotton machinery, and also of mixing them instead of cotton with wool, we have directed our attention particularly to such modes of assimilating these fibres to cotton as would, in our judgment, be likely to accomplish the desired results, and to such modifications of cotton machinery (wool machinery not requiring any changes) as would best adapt it to the production of yarn from such assimilated fibres. We have not deemed it necessary to give much time to the mechanical modes of long-line flax-spinning now in general use in European countries, as the raising of marketable flax for long-line imposes too many burdens on the growers, and is produced at too great a sacrifice of seed to warrant, at present, its extensive cultivation in this country. Both the raising of flax for long-line, and its manufacture by machinery where grown, seem to be better adapted to countries of humid climates, and of comparatively small areas for cultivation, subdivided among a dense population accustomed to cheap manipulating labor. There are very few mills of this kind in the United States, and most of these are using long-line for coarse fabrics, obtained to a considerable extent in the Canadas, whence it is imported free of duty under the reciprocity treaty. A member of this commission recently visited one of these mills at Braintree, Massachusetts, and was shown the various machines and processes for making