

Adams Block 1839

**UNIVERSITY OF MASSACHUSETTS LOWELL
CENTER FOR LOWELL HISTORY**

**LOWELL MUSEUM
MERRIMACK MANUFACTURING COMPANY REPAIR SHOP**

1st Floor, 1st Row - left

April 14th 1834

An account of

What is going on

In the Mills

&

Repair Shops

April 14th 1834

No. 1 has finished her alterations and is now in successful operation (Clark 1591 ps)

No. 2 at the close of Saturday April 12th there were 10 filling and 8 warps Spinning frames altered in spinning Room of this mill.

Dressing Room - one set of Copper reeds had been put in and frame in operation

Weaving Rooms all the looms running to a charm

No. 4 = Lower Room
Looms were altered and in operation. One hand present to alter the remainder

Carding room all repaired
Drums all painted and warps going nicely excepting roving a little to heavy.

Spinning is altered and finished. Yarn strong, clean & soft.

April 14th 1834

Weaving Room

The wide looms taken from No. 1 Lower Room are all finished and most of them in operation.

Dressing Room

8 Dressing frames 4 wide & 4 narrow are completed - one wide is altered and ready to be put up.

7 Warping are or can be in operation when needed.

No. 5 Lower Room looks well the carding is yet to be altered. Nothing has been done (excepting a few repairs) and nothing, I believe, nothing is to done.

Weaving Room – nothing yet has been done in the Room itself although the loom-work has been begun and quite a quantity mostly finished.

Dressing Room – one dressing-frame has been altered though yet started
Warpers all moved

Looms being finished and will be in operation after the expiration of a fortnight or three weeks.

April 15th 1834

3 Spinning in Lower Room to have the velocity of Front Roller – if thought best from 82 to about 88 or 90.

Informed Mr. Hill, by request of the Superintendent to change the gear on top of upright being 34 teeth is for one of 36. This will produce yarn greater in quantity and best in quality providing it be not too slack to weave well. I think it will not be the case.

Looms to Dressing were set in their places this Day and will be ready to prime over tomorrow 2 hands are yet retained in the Room 2 are on the Lays at the Shop 1 can be taken from No. 4. L. Room to Hang Drums and cut Belt Holes.

The alteration of Looms in No. 5 Dressing Room on Saturday the 5th of April (1834) Mr. Jewett Commenced on Monday to put Sideboards in Cards (No. 5)

April 16th 1834

No. 4 Mill is to supply No. 1 Mill with the filling from 4 frame for a short time by orders of Mr. Clark.

This will be necessary for a few days only as No. 1 Lower Room has increased the velocity of her front rollers and the Upper Room has Changed the gears on top of Upright from 34 to 36 teeth.

17

No. 1 by extension has not needed any assistance from No. 4 as yet.

Commenced White-washing No. 1 on Monday 14th.

17

Continue to alter Spinning in No. 2 a great difference in the run of the frames is perceptible. I think the company will gain the volume of one frame = about – 8 ½ Looms, by this alteration.

No. 4 is progressing rapidly
Windows put in partition round form –

Pump of Lower Room of this Mill.

April 18, 1834

Jewett Commenced on Wood-work
for Comb-jacks to Cards
Kick boards to cards primed.

Loom in Dressing Primed
yesterday and painted today.
Pryed the new Compound Crank
on Sweeps to Dressing frames – its –
operations are perfect and I think
a decided improvement -

Carried 145 Hacks – flats - Dents –
to Locks & Canals = their dents were
intended for 56. But are to be
altered to 58. The Locks & Canals
have a cast steel gauge by which they
can be altered in fewer hours.

The Window stone for No. 3
Lower – Room came this day and is
being put in to its place – These windows
will add much to the Light-Beauty & con-
venience of the Room - and much I may
say also to the health of the help.

20

Mr. Green and his hands were obliged

to Hang Drums this day in Weaving room
to Drive Looms in Dressing Room.

April 21st

Jewett continued to Box up sides
of cards. The sides were Painted be-
fore put in. Jacks to cards are
not yet done (No. 5)

22

Spinning in No 2 is yet being
altered. 12 Wp & 12 Filling are finished.
Received the dents of the 1-8 Beam
Warpers which were sent to Locks & Ca-
nals m 18th.

24

Started and tryed the Compound
Crank on a Dressing frame
in No. 5. It goes well, it has for
its recommendation durability=simplicity
and economy.

25

No. 1 has dressed up all the
wide M. Wrp. = Frames are now
being started with [movement?]

26

Power Room No. 4. The coarse M.
Warp has this day finished - all the
Looms are altered and are now weaving
the fine wide. J. Clark

April 28th

Started first Loom altered
into Crank. Pick 1.11 ½ per minute.
The Binder in this loom is of a
new description. After Mr. Cushing's
fashion it holds the Shuttle well
and bids fair to be quite an improve-
ment.

29

Messrs. Green & Cross continue on Loom
- work in No. 5 = Roby & Livermore
worked one day each. Chase commen-
ced Yesterday.

No. 2 Spinning has 14 Filling
- 13 Wp altered. It requires 4 hands
to do this work 2 wood 2 Iron
on a filling frame - Watkins & Prince
labour 19 hours each, Iron, Roby &
Livermore 8¼ hours each.

Warp frame Watkins & Prince
17 hours each – Roby & Livermore
7¼ hours each.
Wages Watkins 6/

	Prince	8/		
	Roby	7/6		
	Livermore	7/6		
Iron,	Filling 3.76	Wood	188	\$ 5.63
	Warps 3.25	“	163	“ 4.88
	April 29			

End of Shaft in Warping
 Cylinder of one of the warpers,
 in No. 1 this day broke - It was
 thought best while the warper
 was stopped to alter it like those
 in No. 4

30

Cards put in No. 5 taken from
 No. 3 are yet deficient in the
 following parts – 6 Cast Iron pulleys
 to drive Doffers – 6 Do. for
 feed Rollers.

Finishers

2 Setts of feed rollers – 6 Doffer –
 Bonnets - 11 Setts Calendar Rollers
 11 Trumpets – 11 Setts Cast pullies
 5 Setts Rollers Stands – 1 Loose pulley

Moved cards from No. 3 to
 old cotton house – many are nearly
 entire – few are deficient in many
 parts.

2 hands commenced on 40 new

Lays for No. 5 Weaving Rooms.

Square ft of covering to one card

Broken	Main Cylinder @ 6/9	14½	= \$16.25
	Doffer	4.8	5.40
	Leaders-in	2.5	2.81
	Sett of Laps	2.45	<u>2.53</u>
			\$ 26.95
Finisher	Main Cylinder	14.5	16.25
	Doffer	4.8	5.40
	Laps		<u>2.53</u>
			\$ 24.18

May 1, 1834

Started warper in No. 1 – the shaft
was broken
No. 2 commenced April 26th to card.
Laps for Locks & Canals & contin-
ues.

2 Hands commenced on 40
new Lays. No 5 Hurd Wright
Osgood

2

Took an old Dressing frame from
No 2 and put it in No. 4 – it

has been altered, similar to the others

May 5rd

Sanders is setting up this frame. Will get through tomorrow.

3

Messer Hurd Wright & commenced to make 40 Lays for No. 5 Upper Room.

May 5th 1834

Sent a comb with the new fashioned Jacks & Rollers to Phineas Adams, Esq.

Cast Iron	2 lbs.
Wrought “	3 ”
Labour	$\frac{3}{4}$ of day

Charged \$2 Paid July 31st

10 Looms in operation in 5 Dressing.

2 Spinning, 16 Filling & 15 Warp

4 There are about 30 Beams of coarse M. now in No. 4 Upper-Room say average half-full.

1 Put Flyers on two looms in lower room – the looms were in a very dark place, which rendered it very inconvenient to see and keep the clothe the right quality.

6

5 Started 20 Looms in No. 5 Dressing – they run well – there

are 14 more in this room yet to
put in operation – they start by Thursday.

May 6th

Repairing one Spinning – Frame
in No. 5 Lower Room – Spindles
much worn.

Removed the Bed Loom
from No. 4 Dressing to No. 3
for the present.

All the work on Looms in
Dressing Room was finished
this morning.

8

Jewitt to repair all the card in No. 5
so far as it regards their Combs - Jacks.
etc - the 18 taken from No. 3 to have
the Front – posts cut-off and Bonnets
fitted similar to others in said Mill.

9

Dresser. after the new plan went into
operation this morning – its simpli-
city, durability & cheapness – the convenience
which it affords to the help – the facility
with which the threads can be mended are its
chief recommendations.

One hand commenced to put cast-iron
stand for yarn-roller on back post

of Loom in No. 4 Lower Room.

May 10th

No. 2 Spinning at the close of this day there were 18 Filling & 17 Warp frames altered.

One frame in Lower Spinning Room No. 5 repaired and put in successful operation. New bottoms were put on the Flyers – some new Spindles.

Altered a Loom in No. 1 – Upper – Room Carried the Beam further back. The advantages are these: 1st the yarn has a much greater chance to give when it meets with any obstacle – 2^d the lease-rods can be further apart = 3^d the distance between the cloth and front leaf of harness will be equal to that. Between the back leaf and lease-rods. 4th the yarn Roller can be moved nearer the yarn Beam. Thereby making it more convenient for the [young - lined out] help to mend the threads Lastly we can get a much better Shade or Shed.

12

No. 5 The 34 Looms in Dressing No. 5 have commenced weaving – the cloth is of a very good quality – very soft – long nap upon its surface.

12 Looms have stopped in No. 5
Upper Weaving Room to undergo an alter-

May 12th 1834

ation like that on the Loom in Dressing
Room – 2 more will stop tomorrow making
14 in number – It is intended to stop
this number till the whole Room is altered.

13th

Messrs Green & Cross commenced
on Monday the Looms in No. 5
Upper Room

15

Speeder in No. 4

[DIAGRAM]

15

There are 19 Filling & 17 Warp frames
complete in No. 2 Spinning.

16

Jewett is to make 4 Boxes in
which to put the small grinding
cylinders when not in use (No. 5
Carding).

May 17, 1834

The last of the M cloth was
taken from the Loom this day –
brought and enter at the Cloth Room

19

Mr. Jewett making Tops for
some of the 18 Cards put in Mill
from No. 3

20

Messrs. Green, Cross & . Continue
on the 14 Looms first stopped

21

No. 8 Dressing Frame in No. 5
was stopped on the 19 to be moved
into its right place and undergo an
alteration and some repairs.

22

14 Looms finished and painted.

23

There were 21 Filling – 20 Warp
frame altered & repaired in No. 2
Spinning Room.

May 24th 1834

14 Looms stopped this day to undergo an alteration. It was thought at the commencement of these alteration that 14 Looms would be sufficient to stop at any one time - but in order that the Iron and Wood-work should keep pace with each other, it was found necessary to stop 28, the average would be about 20

26

Messrs. Hurd, Wright & . Commenced on the 2nd 40 Lays for No. 5 Upper Room.

27

Stopped No. 7 Dresser that it might be moved and altered similar to No. 8

28

Put in operation 6 Looms that had been altered from the Rocker to Crank Loom. They run about 1.11½ beats per minute – they are now fine Looms with this exceptions the Yarn Beam or Back Roller should have been placed further from the Lease-rods & Harness.

May 27th 1834

No. 8 Dressing frame went into operation this day - It does all that was expected.

30

8 Looms in No. 5 Upper Room were put in operation - go well -

By request of the Superintendent desired Mr. Eaton to Change the gears on the tops of the Uprights to the Speeders - making one tooth less by which more twist would be put in the roving. - Requested Mr. Hall to increase the size of the Drums by which the Speed of the front roller of [?] would be 88 warp 82 turns per minute. Changed the pinion on stud, which Back-Roller, on warp from 31 Teeth to 29 by where the warp yarn is made about 2 Nos. finer then the [?] with the same roving.

31

Put a pair of the Jaw Temples on one of the Looms in Upper-room No. 2 They go well so far - they will afford quite an advantage if double selvage threads can be dispensed with.

June 2nd 1834

All the Spinning, 24 [?] & 24 wp,
in No. 2 Spinning Room has been
altered and is in full & Successful oper-
ation this morning.

3rd

Changed the geer on top of 2 uprights –
of the [?] frames from 34 to 35 teeth
by which [more – lined out] yarn [is turned off – lined out] greater in
quality and softer in quality is
turned off from each each spindle per day

4th

Since more twist has been put in-
to the roving of No 1 much less waste
is made. - Roving is stronger and winds
from the bobbin to the last inch.

5

16 Looms stopped to under-go an al-
teration in Upper Room No. 5

6

Put in operations 8 Looms
in No. 5 Upper room

7

Stopped 8 and started 6 Looms having
been altered, repaired & painted.

June 9th 1834

Cards	Mr. Jewett continues on the 20 Cards taken from No. 3 and put in No. 5
	10
Looms	14 Looms stopped to undergo an alteration
	11
Looms	6 Looms stopped
	12
Roving Box	Commenced on the Roving Box in No. 2 Dressing - This box is only a con- tinuation of that leaving from the card to the Spinning Room - It was made as a matter of convenience to the Dressing Room - the was often entangled to- gether if brought up stairs in a <u>Basket</u> .
	13
Looms	6 Looms put in operation No. 5 Upper Room.
	14
Roving Box	Box in No. 2 Dressing was finished this day.
	15
Looms	8 Looms put in operation (No. 5 Upper).
	16
Looms	15 Looms stopped to undergo an alteration
	17
Looms	6 Looms put in operation
Lays	41 hands commenced on 33 Looms-Lays

June 18 1834

Yarn
N2

Brought a beam of yarn from
No. 5 to No. 2 weaving in order that
Mr. Holland try the Jaw Temples on
No. 40 yarn with a Crank Loom.

19
Started one of the warp Spinning frames
(No. 2) which had been stopped to have new
Bottoms on the flyers; and flyer made
narrower.

20
8 Looms started. Go well - 1.11 1.2 Pic.

21
Put in operation the Spinning
frame No. 2 Dressing Room, two
had been stopped to repair flyer –
Bottoms and made flyer
narrower.

23
8 Looms set to running in good or-
der.

24
8 Looms started this morning

25
[Put in operation 14 Looms – lined out]
Stopped 14 Looms to undergo
an alteration

June 26, 1834

Put into operation 7 Looms,
the last on River-half of No. 1,
Upper Room.

27

Messrs. Hurd, Kennard, Colburn & -
Commenced on 42 New Lays

28

Yarn in No. 4 Looks beautiful
is uncommonly even & strong
The filling keeps the looms
well supplied – being stopped
and cannot be put in operation
until changed into cranks.

30

Mr. Jewett left the Mer'k
Mills, pro bona publica,, this
day.

July 1

Put in operation 8 Looms
in No. 5 Upper Room

3

Stopped 6 looms

July 4, 1834

Moved the drums in No. 2
Lower Room & left 4 Looms
2 taken from No. 1 one from
the upper and from the Lower
Room. the other two were taken
from the Store House – these
Looms will be put into operation
about the 1st of August.
Some repair is necessary.

Repaired the plaster in
No. 5 Lower Room. Much
having fallen down from
the joists

5

Turned the Lagging [from – lined out]
on the drums in No. 2 to
drive [proper – lined out] to drive the looms,
108 Picks per minute.

7

Put in operation 14 Looms
No. 5 Upper Room

8

Yarn in No. 5 is rather heavy
this is occasioned in a great mea-
sure by the Starch which is of

a very inferior quality. The Carding room is undergoing an alteration which when completed will have a tendency to make the Laps, Drawing & Roving more even and nearer to the true Standard.

9

Stopped 14 Looms to undergo an alteration in No. 5 Upper Room.

10

Started 8 Looms

11

Put in operation the Cop Spinner of No. 2 to spin for No. 1 used the roving of No. 1 Mr. Phelps loaned Mr. Whittier a hand to run the frame.

12

Mr. Moore is to make 3 Driving Belts 6 inches wide - for Lower Room No. 1

14

The Cop Spinner supplies rather more than 8 Looms. With this filling - No. 1 will keep her

Looms in operation – She will support herself as soon as this very Hot weather is passed

15

Stopped 14 Looms to undergo an alteration in No. 5 Upper Room.

16

Ordered by request of Super't

24 Pieces of		No 18 46	
1	“	“	“ “ 82
10	“	“	“ “ 12
1	“	“	“ “ 14
1	“	“	unknown, Knee -

Hanger
Knee pipe
Straight “
“ “

[DIAGRAM]

17

6 Looms went into operation this day. No. 5 Upper Weaving.

18

Put some Goose-necks of the new crooked pattern – they possess every advantage that was anticipated the would.

July 19th 1834

No. 9 Dresser was put-in operation this day = It was an old frame taken from No. 3 and altered, repaired. Painter etc like the frames in No. 4

21

Messrs Chase & Colburn commenced arranging and repairing the Cards in No. 5 – Putting on the new Combs and new motion – This motion “goes to a [?], its advantages are these – They cannot be pressed against the Doffers as they formerly could – much more durable - they make less waste because they will retain their place - close to the Doffer and not allow the cotton to Lap up between the Comb & Doffer as was frequently the case with the old which not only making more waste but requiring much more attention and time of the help.

22

Put into operation the new Looms made for No. 3 in No. 2 Upper Weaving Room – this Loom is on probation – its faults, if any, are to discovered, pointed out and remedy applied.

July 23, 1834

Started 6 Looms in No. 5 Upper

24

Stopped 14 Looms to be altered

Set 8 Looms to running.

25

Beam Box in No. 5 is completed and operate admirably – It has this advantage over those in No. 1 & 4 – It requires but one rope and left to the management of the Dresser alone.

26

14 Looms put in operation with the new goose-necks Cross & Saunders Commenced to move and resett the Machinery, on the new plan, in No. 5 Carding Room

28

Put in operation 2 Stretchers in No. 5 on river-end - these were move on Saturday - reduced the speed to one 100 turns of front rover. Mr. Wilson took a beam from No. 5 and put in one of his Looms; No. 1 with the Jaw Templer - the selvage will surpass any thing of the kind yet seen.

July 29 1834

Messrs. Green and Livermore
Commenced on putting up the
pipe to few Jinks in weaving
and carding – rooms – the water
is taken from the bottom of the
Large Cistern - carried over the
Garrett floor – down near back wall
of Mill – Pipe 35ft 8 in – 326. the
Cost \$1467.

old Pipe	2.13
	1.50 Stock & forging 60 bolts
	.60 Cutting bolts topping nuts
	.67 Stacks for new sinks
	.25 White Lind & Leather washer
	1.00 2 Brass Co.
	11.88 Green & Livermore
	<u>30</u> Butts & Screws & Nails.
	\$33.00

30

Stopped 5 Looms, the last
to be altered in No. 5 Upper Room
Put in operation 10 Looms in
same room

31

Messrs. Cross & Saunders Continue
to move & resett the machinery
in Carding Room No. 5

August 1 1834

Belt which drive Spinning slipped very badly and was taken up runs very well as usual - It was originally intended to have a finder pulley attached to this belt – this I think will be necessary – if more spinning should be put in this room (No. 5 Lower). The Large Pulley in the cellar should be enlarge and the lagging which drives the leading belts should be increased.

2

At the close of this day, there will be 4 stretchers & 2 coarse speeders and 4 drawing frames on the Print Works end of No. 5. - 4 stretchers on driver end – Mr. Green will have finished the pipe & sink.

Put up a long drum in No. 1 Cellar – this drum drives 8 Looms and has a Large Lagging, with its respective driver increased in the same ratio in order that may not slip even should it be somewhat loose

August 4, 1834

Loom in No. 1 Upper Room finished. The Bench Cloth rack and Desk are to be altered and replaced.

Put in operation the Coarse Speeder on River-end of No. 5

New Drum in No. 1 Cellar drives its 8 Looms too fast-by 4 picks per minute - a piece of leather on the driver will set them right.

4

Mr. Tucker commenced to paint the Drums, Beams, Posts, Doors, Belt Box etc in No. 5 Carding Room No. 1 Watkins sent one hand to Lunetise the Works.

5

Cross & Chase commenced to hang the Drums to drive Cards, Grinder & Lap Winder No. 5

P

7 Looms went into operation in No. 5 Upper Room – these are the last of the Looms in that Room to be altered.

August 6, 1834

Repairing Sink in No. 5
Carding Room.

Sept. 15

Altered and put into operation 4
Looms 2 taken from No. 5 – 2 from No. 3.
The expense of putting these Looms
in running order-moving other looms
to admit them - hanging drums
was about \$20

Sept 16

Completed all the Looms in No. 5 Lower Room. They have the long goose-necked in back-yarn-roller-stands - they work admirably - few threads break easy on the yarn - Cloth very soft-good nap.

Oct. 6, 1834

Commenced to alter & repair the Narrow Looms in No. 4 Upper Room. The back springs were taken off from springs, put on the Flyer - new-face - race and back boards were put on the Lays - an obvious advantage was the result, a perceptible difference in the Cloth - these looms made the C. cloth - a thin article which here-to-fore had been very uneven - the number of picks varied which no skill or exertion of the overseer could not or at least did not remedy - It varied from 56 to 70 picks - the standard for this cloth is 68 picks - now is very even and soft. The no. of yarn is quite constant filling 25 Warp 27

10

Started Cop Spinner for No. 4 Lower Room.

Banding and twine used in Mills
for Six months ending Nov. 15, 1834

	No. 1	No. 2	No. 4	No. 5	
Banding	182.10	300	300.8	257	= 1040
Twine	55	46	19	186 $\frac{3}{4}$	= 306 $\frac{3}{4}$

Mills Banding	1040 lbs	1040
Twine	306 $\frac{3}{4}$	

Hamilton	118 $\frac{1}{2}$	
Print Works	<u>110 $\frac{1}{2}$</u>	<u>536</u>
	536	576

Argand Lamps No. 2

Carding Room Front Breaker	8
[?] and Back Drawing	8
Coarse Speeder	4
Stretcher	<u>7</u>
	27
Spinning 1 st 3 rd & 5 th & 7 th Allies 4 each	16
2 nd 4 th & 8 th “ 6 “	18
Phelps Lays and Lox	<u>6</u>
	40

Oct 22 1834

Put in operation the Crank
Loom taken from No. 5 Upper
Room. Carried to L. Room – this
is quite soft

Lamps Contained 67

Dressing Room

on each side of center Beam to each frame	16
2 in the 1. 3 rd 4 th 5 th 6 th 8 th 9 and 10 Allies	16
Warpers	6
Add 2 for an extra Dresser, if wanted	<u>2</u>
	40

Lower Room

Front Alley	24 Looms	6	
Middle “	12 “	6	
3 rd “	28 “	8	
4 th “	<u>36</u> “	<u>10</u>	30
	100		

Upper Weaving Room

Front Alley	40 Loom	12	
2d “	42 “	12	
3 rd “	44 “	12	
4 th “	<u>44</u> “	<u>12</u>	48
	170	48	<u>48</u>
			185

6	Small Globe Lamps for Mirrors
4	“ Porches
<u>10</u>	2 in each room to carry about machinery evening
20	

October 28th 1834

Commenced to alter and repair the
Looms on the west half of No. 1
Upper room.

These looms have needed repair –
for some length of time – only waited for
some good opportunity – an opportunity
has offered itself - The Mr. Wilson, the former
overseer, has left his place has been supplied
by Mr. John Cushing who takes hold heart
and hand in the alteration – This room –
having now a great deal of new – help is an-
other reason why the looms can now more
conveniently be repaired than at most any other
time.

The alteration consists in making
the horizontal pieces of wood on the
Flyer some longer and the Iron-knee
is made shorter – the small bayonet
is also shorten – repair our new
face, race, backboards and headblocks
- new Picker - Combs.

The Friction slides have been all
set over the Center of the Shaft.
this I consider an advantage it gives
the levers all the motion the Cams
possess.

Cards on Hand Nov. 5, 1834

In Store House

11	Setts of Finisher Laps	15 Single M. Cylinders. P
13	“ of Breaker “	7 ” “ ” H
4	Double Main Cylinders	17 Leaders-in
5	“ Finishers Doffers	1 H. Single Doffer
6	“ Breaker “	

In Mills

No. 1	1 Set of Breaker Laps 2 Doffers Finishers
No. 4	2 Leaders-in 4 Doffers Breaker 2 “ Finishers 1 M. Cylinder B
No. 5	1 Leader-in 5 Finisher Laps 5 Breaker

Making in all

16	Setts of Finisher Laps	16 Single M Cylinders Beam.
17	” “ Breaker “	7 “ ” ” Fin
4	Double Main Cylinders	20 “ Leaders-in
4	“ Finisher Doffers	5 “ Finisher Doffers
6	“ Breaker “	4 “ Breaker ”

Wanted in Mills

No. 1

- 4 Setts of Breaker Laps
- 2 Setts of Finisher “

	Main	Cylinders	Doffers	Leaders-in	Laps
No. 1	4B	2F			4B 2F
No. 2			2B 4F	6	3B 3F
No. 4	2B	3F		6	
No. 5	8B	13F		21	21B 21F
<hr/>					
	14B	18F	2B 4F	33	28B 26F
		<u>7</u>	<u> </u>	<u>20</u>	<u>16 17</u>
To order		11		13	12 9

Single Main Cylinder = 11 = 11
 Single Leader-in = 7+ Double 6+= 13+
 Single Laps Breaker = 9+ Double 3 = 12
 Single “ Finisher = 6+ Double 3 = 9

The above were ordered
 on the 12th of Dec'r 1834

Hands in 4 Mills
Nov. 5, 1834

	No. 1	No. 2 50		No. 4 Compliment-nos		Nov. 5	
Carding Room	43-12=55	38	39	48	51	38	
Spinning Room	50-8 =68	66	66	59	59	65	
Weaving Room	90	104	104	77	82	87	
Dressing Room	26	25	25	26	26	23-28=51	
Lower Room	55	58	58	36	39	28	57
	<u>344</u>	<u>292</u>		<u>257</u>			<u>278</u>
						1164	

Nov. 4

Put the new coarse Speeder in No. 5. This will be put in operation as soon as convenient - not absolutely needed until the No of yarn in this mill is changed - The sooner, However, it is started the sooner will the present 3 in some Mill be relieved from their extra burden.

Nov. 15, 1834

This day completes the alteration
on Looms in No. 1 Upper Room,
old half, so called.

Nov. 21

Ordered 185 Lamps Weights
No. 9 10

Water-wheel shaft of No 1 mill broke
Nov. 24 placed a brace against
the axis which retained the shaft
in its true situation until the 26
A new pattern for shaft was made
Cast and turned at Machine Shop
on the 26 – fitted and put in
on 27, Thanksgiving Day.

Commenced to repair Loom
in No. 1 Lower Room on 29 of
Nov The repairs are new face
back and race boards – Alteration
flyter on back of race Wooden
Springs on back of Loom dispen-
sed [?]

Nov 29 1834

Ordered from Dana's Gin Manufactory
48 tin covers for Spinning Clocks – 48
do for middle roller gear end – 96 do
for back roller gear end.

Dec 1st

Yarns in Nos 1 & 4 rather heavy
They are never-the-less very even and
quite clean compared with the starch

Commenced to Grind the New Cards
in No. 3 this morning.

Brought down from Machine
Shop and set-up right hand lap-
winder No.3

Waste made in No. 2 Mill

From Picker	81 lbs. of Cotton	8 oz.
“ Breaker 65	“ “ “	1.14
“ Finisher 76	“ “ “	2.8

The cylinder strippings are included in –
Cluded in the finisher Waste = 2 lbs.

[NOTATIONS]

The Nos on Looms
In 5 Mills Dec 6 1834

No. 1	Upper Room	164 from	1 to 164
“	Lower “	90 “	165 “ 254
No. 2	Upper “	160 “	255 “ 414
“	Lower “	98-2 “	415 “ 510
No. 3	Mills		
	Upper Room	166 “	511 “ 676
	Lower “	104 “	677 “ 780
No. 4	Upper Room	154 “	781 “ 934
	Lower “	72 B+2“	937 “1008
No. 5	Dressing Room	34 “	1009 “1042
	Upper “	154 “	1043 “1196
	Lower “	57 “	1097 “1253
No. 1	254	Looms	A Cloth
“ 2	258	“	H “
“ 3	270	“	E “
“ 4	226	“ 150	B 76C ”
“ 5	<u>245</u>	“	E “

1253Looms in 5 Mills

No. 5 Mill will make H Cloth as soon as No. 3 is in fall operation

Main Shaft

[DIAGRAM]

Dec 6th 1834

This evening will find 42
Looms altered and repaired in
No. 1 Lower Room.

Steam Cast Iron Pipe in
No. 4 operates very well so far
We have not had a very cold day
yet to give it a fair trial.

9

No. 1 Filling Box

Empty Box	18	pounds
Box with empty bobbins	47 ½	“
“ “ full “	43	“

Dementions – inside

Deep	25 ¾	inches
Wide	10 5/8	“
Outside	26 ½	“

Loom Beam No. 3 Weighs 43 lbs.

Dec 9 Returned the Lawrence
Weight pattern

Covering to Double Cards	
	square feet
Main Cylinder	28.26
Doffer “	11.68

Wire Netting 25c square foot
The Maker finding stock

Ordered from David Dana’s

4 Gear Covers to Coarse Speeders R. hands
48 for stretcher 24 Left 24 Right
24 Drawing to be made in pairs

Dec. 17

Mr. Brownell orders	64
Dressing Brushes	
Mr. Clark “	100
New Brushes on hand	40
Old “ “ “	<u>22</u>
	226
3 setts for all the frames	<u>192</u>
Mill have spare	34

These new ordered from
Belvidere

18

Order from L. Drake & Co.
one piece from 880 – Beam
Box Weight

Dec. 18, 1834

Sent to Mr. Perrin at Machine Shop, 40 Dressing Brushes – to be fitted to frames for No. 3

Weight of Laps No. 1									
	lbs.	ozs.	empty	rollers		lbs.	ozs	empty	rollers
1	13	14	6	2	1	13	10	5	10
2	14	10	6		2	10	4	5	8
3	14	4	5	14	3	14	10	6	4
4	13	6	6	6	4	13	10	6	
5	13	12	5	12	5	14	14	6	2
6	14	10	6	14	6	14	2	6	4
7	13	12	6	2					
	98	4	43	2		81	2	35	12
	<u>43</u>	<u>2</u>				<u>35.</u>	<u>12</u>		
Cotton 55	2				Cotton 45	6			

Breaker Waste 1 lbs. 8 oz.
= 1.14 to 55.2 of Cotton

Spreader 6 oz.

Finisher Waste 1 lbs. 2 oz. to 45.6 Cotton

55.2
45.6
 2)95.8(47.12 of Cotton =
 produced 3 lbs. of waste

Finisher	55 lbs	2 = 1.6
Breaker	55	2 = <u>1.14</u>
		3.4

3 lbs 4oz. to 55.2 oz. = % 6.16

No. 2

Waste from	Picker	81	= 8 oz.
“ “	Breaker	65	= 1.14
“ “	Finisher	76	= 2.8

81: 8: : 100

65: 30: : 100

	<u>100</u>	
81)800(9-89	Picker
	<u>729</u>	
	710	
	<u>648</u>	
	620	

	<u>100</u>	
65)3000(46	Breaker
	<u>260</u>	
	400	
	<u>390</u>	
	10	

76. 40 : : 100

	<u>100</u>	
76)4000(52.6	Finisher
	<u>380</u>	
	200	
	<u>152</u>	
	480	

Picker	10 oz.
Breaker	2.14 4.6
Finisher	<u>3.09</u>
%	6.12

56 Looms have been altered
and repaired in Lower Room,
No. 1

Dec. 23 1834

Put No. 3 Picker in operation
this day – weight of Laps 18 oz.
Started some of the cards same
day

24

Put in operation 2 Filling frames
with No. 5 Roving Frames start
finely - require about 90 minutes to
fix a sett – have roving on stretchers
weight about 25 to 12 yds – which
will turn out about No. 40 yarn.

26

3 Stretchers in operation will start
which half of card Room on Monday
or Tuesday.

27

4 Filling & 3 warp frames in
operation, Filling for No. 5 Dressing Rm

29

Whole half of Cards started and
one Warper in Dressing Room

30

Half of Carding Room in full
operation. 5 Warp and 4 filling
frames.

No.s 4 and 2 with other
filling frames till 10 o'clock on
Monday 29 – tonight 30 No. 1
will run her filling

Stopped Cal. Spinner in No.
2 from running for No. 4 –
Changed the No.of yarn and
and went to Spinning for its own –
mill - This frame started for
No. 4 on the 10 of Oct. 1834.

30

Put two Warpors in operation
they run finely - Hung
Drum in No. 5 Carding Room

31

3 Dozen Pairs of Stripping
Cards from Belvidere Mills.
1834

1834
Cotton on hand Oct. 11

2157 Bales
used since 593
253
846
average about 360 Pounds
5076
2538
304560

on hand Dec. 27

846: 11: : 1306

1306
846)14366(17
846
5906
5922
-16

Cotton on hand will Supply
the 5 Mills 13.6 weeks from
27 of Dec. = to 1 of April

10 Upland to be added to what is used.

774.991 Pounds

Bales of Orleans
“ “ Uplands

774991
304560
470431 =

1306 Bales

1306
11)846(77
77
76

5)17 (3.4
15 4
20 13.6 Weeks

Jany 1st. 1834

11 Warp frames in operation
No. 3 Spinning Room -
4 Warpers in Dressing Room
started – run finely

3rd.

13 Frames on Warp half are
in full operation in No. 3
Mill.

Copy of order to E & R Douglas
from P L & Canals.

Messrs C&R Douglas will please make
for P. L. Canals

10,400 Stretcher Bobbins
1,000 D.S. “
12,000 Warp “
13,700 Filling “
7,750 Hollow Skewers
500 Pointers
4,100 Warp Spindle Buttons
540 Shuttles

and 2nd

These are for No. 3 Mill
to be delivered in all, Oct. 1834

List of Prices paid in Mills Dec. 1834

	No. 1	No. 2	No. 3	No. 4	No. 5
Speeders	1.56 pr sett	2.82 pr sett		1.26 pr sett	5c pr sett
Winders	min	min		63 + doz	min
Drawing	2.11 pr sett	2.80 & 2.70		1.73 sett	50c doz
Spinning	55@56 doz	4.6 pr sett		54 pr doz	warp 54@55 doz filling 3.94
Dressing	2.1 pr ps	2.4 pr ps		3+	3+
Warping	6.3 pr myds	6.5 pr myds		narrow 2.1 wide 9	8.pr myds
Drawing In	14.5 beam	18/12 ½		narrow 6.6 22/14.5 pr beam	
Weavers	23+ pr ps	30c pr ps	333 C25c		44c

Lowell Jany 10 1835

17 Spinning frames in full
operation in No. 3

Started one loom this day.
Six warpers and 2 dressers

Coarse speeders put in
Operation. No. 5 Carding
Front Rollers 130 turns per
Minute.

Reduced the speed of
the other 3 Speeders from 160
To 130 per minute.
Front roller

15

Altered and put in op-
eration one stretcher with
left twist – former twist
2.55 to the inch of roving
which reduced $1/8 = 1 \frac{31}{32}$

Started one frame with
a creel – in which to use the
roving from said stretcher
- both work finely – roving
soft – yarn stronger and
more free from Cuts.

Lowell Jany 17 1834

Warp half in full operation in
No. 3 Mill – 6 Filling 5 for
No. 5 1 for No. 3

27 Looms started run finely
yarn rather sightly Dressed and
tender - Growing better everyday
No. 1

7 Looms on which new Flyers
should be put - 10 old to be
replaced

No. 1	33987.2	Payroll \$996.94
	43144.3	
	42652.3	
	<u>40664.1</u>	
	160449.1 yds 4 weeks	

160449.996.94.0(0.62 per yds Spinning
96269 4
342460
320998
21492

No. 2	Payroll Spinning	\$951.60
29496.2	141638)95160.0(067	
36899.3	<u>84982 8</u>	
38009	1097720	
<u>37222.2</u>	<u>991466</u>	
141637.3	26254	

No. 4 Payroll Spinning
\$842.88

	J. Clark	14796.1
C= 10022		19626.2
	12509.1	19998.1
	12863.2	<u>18559.2</u>
	<u>12491.1</u>	72980.2
	47886	<u>47886</u>
		120866.2

120866)84288.0(0.69 Spinning per year
725196
 1176840
1087794
 89046

No. 5 Spinning Roll
\$1086.82

	Clark	19727
		26434.3
98987 /	108682(1.09	26756.1
	<u>98987</u>	<u>26069.2</u>
	969500	98987.2
	<u>890883</u>	
	78617	

No.1	0.62	Sett @	0.4
2	0.67		0.56
3	0.69		0.585
5.	1.09		0.472. Room 2.05
			<u>205</u>
			675

Jany 21 1835

3 Dressers in operation in No.
3 Mill

Looms. 40 Looms in successful
operation

24

Looms in No. 1 L. Room
all altered and repaired – No. 3
has started 59 Looms – 4 Dressers
23 Warp Frames – 9 Filling of 4
for its own mill – 5 for
No. 5 – rather more than $\frac{3}{4}$
of Carding Room

26

70 Looms in operation
in No. 3

Commenced the Looms
in No. 2

30

83 Looms in full operation
in No. 3 Mill
2 Dressers altered and ready to
be Drawn-in - one of which
will be done tomorrow

Lowell Feb. 4 1835

Spare hands in Mills
A Compliment for

L. Room & Carding Room - Now

Compliment for Spinning

Filling Spinners	27	
Warp “	12	
Filling Doffers	8	
Warp “	4	
Sweeper	1	
Waste Picker	2	
Spare Hands	<u>10</u>	
	64	
Now in Room	79	= 15 Spare 15

Weaving & Dressing 00

No. 2

L. Room & Carding	00	
Spinning has 6 for No. 3	6	
Dressing	00	
Weaving	<u>8</u>	14

No. 3

Carding	Full	
Spinning Wants	6	
Upper & Lower Weaving about	60	

No. 4
 Lower room & Carding none to spare - 00
 Complement for Spinning (4)

Filling Spinners	27	
Warp “	12	
Filling Doffers	8	
Warp “	4	
Sweeper “	1	
Wastes Picker	2	
Spare Hands	<u>6</u>	
	60	
Rooms now have	68	= 8 Spare
Weaving & Dressing	none	

No. 5

L. Room wants	2	
Carding room	none to spare	
Upper & Lower Spinning	22	”
Upper Weaving	10	”
Dressing “	4	

No. 1	has	15 spare spinners
2	“	6 going in No. 3
4		8
5		<u>22</u>
		51 – 6
		= 45 spare

	Weaving rooms spare hands		
No. 1	none		
“ 2	8 for No. 2		
“ 4	none		
“ 5	14 -2 for L. Room		= 20
Weavers wanted for No. 3 about			<u>60</u>
Weavers deficient			40

Warp yarn on hand in No. 1 & 4

No. 1 has 14 Section beams containing 40.2 pieces each		= 563
On loom beams about		<u>650</u>
		1,213

Cloth's yarn on warp 157 pieces
per week 157)1213(8 weeks nearly

No. 4	No. 4	
Has 49 section beams containing 8000 yds of yarn each = about 36 pieces		
=	1764 pieces	B
	312	C
	<u>600</u> on Loom beams	
	2676	

Cloth's gain per week 54 pieces
54)2676 (49 weeks

<u>216</u>
516
<u>486</u>
30

The Whole Room, Upper,

No. 3 Weaving is in full operation
The 6th Dresser will start tomorrow.

Prentice Hitchcock wishes
a situation in a carding

Feby 25 1835

Ordered from Jones Woods & Co
The following list of cards

20 set of	Finisher Laps	
24 “ “	Breaker “	} narrow
12 Doffers	Finisher	} cards
10 Doffers	Breaker “	}

28
20 Looms in operation at

[DIFFERENT HANDWRITING]

Number of cans necessary for No.3 Carding room
arranged by the Overseer

12 inches	2 in Picker for waste	}	
	106 for Breakers & Lapwinders	}	210
	2 " Lap Waste	}	<u>200</u>
	48 " Drawing	}12 inches	
	44 " Finishers	}	<u>10</u> to order
	<u>8</u> " Drawing Waste	}	
10 inches	96 - 12 to each Middle head	}	144
	48 - 16 " " Middle head spare	}10 inches	<u>132</u>
			12 to order
8 inches	96 - 24 to each speeder	}	348
	88 - 11 to each Fast head	} 8 inches	<u>268</u>
	144 - Card side Middle head	}	80 to order
	20 - 40 to wast 4 to fast hed & 16 to Stretchers & Speeders		

Lock & Canals furnish 200 -12 inch 132 -10 inch & 268 – 8 inch

Lowell March 6th, 1835

Ordered from Dana's the following list of Tin Cans

for No. 3 Carding
10 of 12 inches
12 " 10 "
80 " 8 "

Ordered from E. & N. Douglass two hundred shuttles like sample for
No. 3

1835 Lowell March 30

The four last looms in No. 3 lower Room were put in operation this day. The Mill now is in full and complete operation, & turns off about 900 pieces per week = 29,250 yds. From the about data it is calculated that in the longest days in the summer, the mill will be able to turn off 1000 pieces pr. week = 32,500 yds.

April 4 The week ending April 4. 1835. No. 3 Mill turned off from 270 Looms 927 pieces of cloth $32\frac{1}{2}$ yds each = 30, 127 $\frac{1}{2}$ yds.

April 1 Commenced the alteration in No. 5 Mill from No. 38 yarn to No. 30 – suppose the alteration will take about 7 weeks time and no more.

April 7 Altered the weight of the Laps in No. 2 Card Room on one half the Mill, from 30 oz. Spreadings to $32\frac{3}{4}$ oz spreadings. There are, upon an average, 9 Spreadings in one Lap.

Banding in 48 Throstle Frames
No. 3. Mill - 160 Spindles each
256 yds in one Frame = 2 lbs. = \$ 38.40 }
12,288 “ ” 48 do 96 pounds @ 40c }

11 The a/c of Stock taken this day was as follows:
Dressed Warp per piece, at half the weight of cloth
Undressed do do the actual weight, Cloth per weight.

Expense of Materials & Labour in 405 Looms					
Harness	48	Leese	Harnesses for No. 3 Mill		
Knitting	405	Pair	Harnesses	@ .50c	= \$202.50
Do	8	Leese	do	“ .62½	= 5.00
232 ½ lbs		Twine		“ .40	= 93.00
10	Galls	Japan	Varnish	1.25\$	= 12.50
½	do	Cobol	do	@ .15c	= 1.25
1	do	Spirit		.73	= <u>63.05</u>
					<u>\$377.80</u>

Then 377.80 413 .91 47/100c each pair
 Cost of Harnesses per beer? 1 83/100 cents

April 18. The week ending this date, the 5 mills
 turned off the following amt. of cloth

A	No. 1 Mill	1643 ps	= 46,567 ½ yds
H	No. 2 Mill	1378 ps	= 40,098 yds
W	No. 3 Mill	1044 ps	= 34,080 yds
B	No. 4 Mill	740 ps	= 20,866 ¾ yds
C	No. 4 Mill	469 ps	= 13,643 ¼ yds
E	No. 5 Mill	<u>814 ps</u>	= <u>2,652 ¼ yds</u>
6088 pieces			182,007 ¾ yds

Recapitulation

6088 Pieces = 182,007 ¾ yds = 36407 lbs.
 The above is the greatest amount of cloth
 ever made by the Mk. Manf. Co.

Attest. S. Adams

May 2nd 1835

The increase of roving, made on the Stretchers in No. 5 Mill, in consequence of 53 teeth being put on the front roller & 33 teeth on the end of the cross shaft, is 31.7 per cent or 15.85 Setts in one revolution of hands on Clock Face. Therefore at each revolution of the hand, 65.85 Setts of roving will be made instead of 50 Setts as formerly.

The roving is increased in size from 26 grs. to 32 grs. or 30.4 per cent.
Then $31.7 + 30.4 = 62.1$ or $65.85 + 15.20 = 81.05$ Setts to each revolution of the hands on the face.

4. Made another alteration in No. 2 Card Room on Picker Laps. Instead of having the Laps remain at $32 \frac{3}{4}$ oz ea. Spreading we increase only 5 pr. ct. on 30 oz. which gives $31\frac{1}{2}$ oz. to each spreading, I then increase the speed of main cylinders $7\frac{1}{2}$ pr. ct. or from $82\frac{1}{2}$ turns pr. minute to $88 \frac{7}{10}$ turns pr. min. By this arrangement we are enabled to do the same am't of work with 44 cards that was done before with 48.

June 22. No. 5 Mill is now completely altered from No. 37 yarn to No. 30 lbs. we're from April 1 to the present date is making the change

1835					
June 25.	Lucy Conant				
To	15 ¼ yds	A & W Cloth	@ 9 c =		1.37 pd
	Caroline Earl				
To	4 yds	A Cloth	@ 9 c =		<u>.36 pd</u>
					1.73
July 1	Liberty Frost				
To	10 ½ yds	E Cloth	@ 9 c =		.95 pd
	3	Elizabeth Clark			
To	10 yds	W Cloth	@ 9 c =		.90 pd
	13	Rufus Whittier			
To	29 ¼ yds	W Cloth	@ 9 c =		2.63 pd
	6	Elizabeth Clark			
To	15 yds	W Cloth	@ 9 c =		1.35 pd
Aug 3 rd	Moses Whittier				
To	41 ¼ yds	W & H Cloth	@ 9c =		\$ 3.71 pd
	29	Phineas Howe			
To	675 yds	Cotton cloth	@ 9 ½ =		\$64.13
	31	Marlin Manufacturing Company			
To	14 lbs	Banding	@40 c =		\$ 5.60
Sept. 19	Charles C. Nichols				
To	35 ½ yds	Remnant Cloth	@ 9 c =		\$ 3.20

1835

July 14 The Stretchers in No. 5 & No. 2 Mills

I have this day altered as follows vis.

The Change gear on the upright that drives the rollers with 35 teeth which gives 1,776 twist in an inch of roving, I take off & put on one with 33 teeth which gives 1,886 twist in an inch of Roving, I take off & put on one with 33 Teeth which gives 1.886 twist in an inch of roving.

This alteration is to remain as it is until the first of Oct. when it must be altered back to 35 teeth – and sooner, if the weather & stock will permit.

18 Altered the Roving in No. 1 Mill from 46 to 48 grains to 12yds. This increases the weight of the section Beams from 107 lbs. to 112 lbs. & gives No. 21 yarn.

This change is made in consequence of the very bad weather and is to be altered back as soon as the weather will permit.

20

Altered the Patterson filling Frames in No. 2 Mill from No. 4 Mill to No. 2 in consequence of their not being able to make roving enough in No. 4 Mill. It is thought that the 3 additional Frames in No. 4 will be able to keep the Looms in operation.

August 1

Altered the No. 2 Stretchers – the change gear on top of upright from 33 to 35 teeth – in consequence of their not being able to keep up.

Lowell August 4, 1835

Altered from the alteration made on
No. 1 Speeders. July 18 - from 48 grains on the
roving to 47. which gives No. 21 ½ yarn and the
wt. of the Section Beam is 109 6/10 lbs. Each

The alteration on the warp Spinning was made
at the same time, from 34 teeth on the top of upright
to 33 teeth. This give 20 twist in an inch instead of
1939 to an inch.

18

Reduced the Speed of Draw'g Frames
in No. 2 Mill from 228 ½ time of front
roller on first head to 200 – 2 head from
181 ¾ to 159 turns – 3d head from 158
to 138 ¼ turns – or 12 ½ pr. ct. on each.

21 [section – lined out]

We shall make the weight of the Lap
Spreadings in No. 5 New Picker as follows
vis. 31 ½ oz. to the spreading

Size of weights ordered	2 weights 3.0 oz. ea.
2 Do 1 “ “	
2 Do ½ “ “	

29

Reduced the number of Picks in our
Printing cloth as follows, vis.

A.	Cloth	from	64 picks	to	62 picks	in an inch
B.	Do	“	70 “ “	“	70 “ “ “ “	“(unaltered)
C.	Do	“	67 “ “	“	65 “ “ “ “	
H.	Do	“	74 “ “	“	74 “ “ “ “	
W.	Do	“	84 “ “	“	82 “ “ “ “	

August 29, 1835

We shall make the weight of the Lap Spreadings 20 ¼ oz. which is 35,777 pr. ct. less than No. 2, Mill. We do this in consequence of the draught in this (No. 5 Picker) being 35,777 less than No. 2 Pickers.

Oct. 9, 1835

Altered this day the Clocks on the Dress'g Frames in No. 2 & No. 5 Mills from 63 to 72 teeth on the large worm wheel. This gives 32 yds. on a piece instead of 28, as formerly. This alteration is made in consequence of the 28 yd. Pieces not being long enough to make 4 Dresses, in a fashionable manner.

Waste made on the Warpers in each of the 5 Mills, for one week ending Oct 17, 1835

No. 1 Mill =	32 ¾ lbs.
“ 2 do =	13 “
“ 3 do =	11 ½ “
“ 4 do =	23 ¾ “
“ 5 do =	29 ½ “

October 20, 1835

Altered the Filling Frames in No. 3 Mill by taking off the change gear of 22 teeth & putting one of 21 teeth. Mr. Phelps made this alteration on his own responsibility. He says, that in consequence of reducing the size of the yarn to No. 38, he is unable to Spin it with a change gear of 22 teeth as formerly: The Frames now Stand thus – Warp 15 teeth – Filling 21 teeth.

Sept. 25, 1835

Simon T. Atherton
To 1 Yarn Beam & Yarn 70 lbs @ 25 c = 6.50
the beam to be returned & beam 44/26 deducted from the wt.
To 4½ lbs Yarn @ 9 c = .56 paid
Oct. 27

Machine Shop
To 24 Special Pinions for Drawing Frames
with 38 teeth (memo inquire at the Shop
the price of furnishing etc.) – [entry – lined out]
27

Mr. Isaac Swan
To 11¾ lbs Wrot iron @ 7 c = .82
23¾ lbs. Cast Iron Pullies @ 6 c = 1.43
Paid \$ 2.25
Nov. 16

Phineas Howe
To 107 yds. Cotton Cloth @ 9½ c = 10.17
Dec. 2

Jonathan Priest
To 241 ft. Pine Boards @ 1 6/10c = 3.86

“

Lorenzo Kimball
To 158 ft. Pine Boards @ 1 6/10 c = 2.53

“

House No. 50
To 100 Bricks & Line

18

Machine Shop
To 12848 lbs. Old Wrot Iron Shafts @ 3 Dr

Lowell October 10, 1835

Rule for taking a/c of Stock

- 1st Take the actual weight of the unpicked Cotton in the Mills
- 2nd Take the weight of Laps, Roving, Drawing etc.
- 3rd Take the wt. of the Roving on Spin'g Frames and then take the wt. of the warp & Filling.
- 4th Call the yarn & cloth Beams in the Weaving Room, half the usual quantity when full.
- 5th Calculate the wt. of cloth pr. piece from the Weight Book or the weekly Bills. And the weight of the Warp Yarn from the weight of the Section beams.
- 6th Take the weight of the Section Beams. And calculate the Dress'd Warp from the wt. of the Section Beams.

Memo April 9, 1836

Instead of calculating the weight of pieces of warp yarn by weight of Section Beams according to the 5th article above. Call the weight of each piece half the weight of a piece of cloth. This alteration is made at the suggestion of Mr. Clark.

October 26, 1835

Altered in No. 4 Spinning Room
one Filling Frame into a Warp Frame
This attraction was made in consequence of
their not being enough warp yarn made, to keep the
Looms in operation on 25 Frames.
The Frames now stand. 26 Warp & 28 Filling

November 1

Ascertained that we have never made so
fine yarn as we have had the reputation of making
We have, therefore, concluded, upon
consulting Mr. Boott. To make the following num-
bers of yarn in the fine Mills, vis.

No. 1 Mill reduced from	No. 22 to No. 21 yarn
“ 2 “ “ “	“ 30 “ “ 29 “
“ 3 “ “ “	“ 40 “ “ 28 “
“ 4 “ “ “	“ 26 “ “ 25 “
“ 5 “ “ “	“ 30 “ “ 29 “

No. 5 Mill we shall run until the alteration is
completed in the Card Room at No. 28 yarn,
When it must be increased to No. 29 Yarn.

“ 11

Memo of Brass Casting in the Time
Movement of 12 Watch Clocks

81 lbs	Brass Castings	@ 30c	= 24.30
	Cask		<u>.32</u>
			\$24.62
Memo	8 Sett clock Pinions	@ 2/6 =	3.33
	5% discount		<u>.17</u>
	Paid Tyler		3.16
			<u>.14</u>
			\$ 3.30

Waste made on Warpers in five Mills for
One week, ending, Oct. 17, 1835

No. 1	Mill	12 1/3 ps	= 356 7/10 yds	@ .4c =	14.27
No. 2	“	5 “	= 165	“ “.4” =	6.60
No. 3	“	5 “	= 165	“ “.5” =	8.25
No. 4	“	7 1/3 “	= 205	“ “.5” =	10.25
No. 5	“	11 “	= 363	“ “.4” =	<u>14.52</u>
					\$ 53.89

Nov. 30, 1835

Changed the change Gears on the upright Shafts on the Warp Frames in No. 5 Mill from 34 teeth to 36 teeth. Mr. Wright thinks he can run it so long as the Roving & the weather remains as favourable as it is at present.

“

Also – made a like change in No. 1 Mill on the Warp Frames by taking off the gear of 33 teeth & substituting one with 34 teeth.

“

Made also, a similar change on the Warp Frames in No. 2 Mill. Took off the 29 tooth change gears and put on those with 30 teeth.

Dec. 2nd 1835

Borrowed of Tremont Man’g Co.
12 Spl. Gears for front roller on Drew’g
Frame – 40 teeth - half large & half small holes
Returned.

3rd

Changed the gear on the upright in No. 4 Mill
On warp Frames by putting 30 teeth & taking off 29

Lowell. Dec. 4, 1835

Received of John Fisher & sent to the
Machine Shop to be anneald

	4100	Wrot Iron Whirls =	1811 lbs.
Dec. 24	2665	do " " =	1228 "
1836			
Jany 16	5724	do " " =	2701 "
" 28	<u>8199</u>	do " " =	<u>3888</u> "
	20688		9628 lbs.

Waste of Iron in	4100	forged Whirls	322 lbs.
Do " " "	<u>16588</u>	do do	<u>1290</u> "
	20688		1612 lbs.

Lowell. Dec. 30, 1835

Received of John Fisher

2541 Tubes – 485 lbs. @ for forging 2 ½c

Waste Iron on forged Tubes 17 lbs.

Lowell. January 2nd 1835

		Phineas Howe to Mek. Man'g & Co.	Dr.	
To	317¼ yds	Cotton Cloth remnants @ 9 ½c	\$30.14	
Jany 2 nd		Mess, Flint & Hutchinson	Dr.	
To	3	Main cylinder Gilletings @ 250	\$ 7.50	
“ 28		Marland Man'g Company	Dr.	
To	13¼ lbs	Cotton Banding @ 40c	\$ 5.30	
		(charged on day book)		
April 6		Phineas Howe		
To	233¼ yds	Cotton Cloth Remnants @ 9 ½c	22.16	
		(charged on day Book)		
August 4 th		Sold Boston Bonnet Man'g Co.		
	5	Cane Reeds @ 40c	\$ 2.00	
“ 5 th		Sold to Walpole Company		
	4	Cylinder, 13 Doffer & 6 Lickerin Filleting		
	for		\$12.50	
Aug. 8		Phineas Howe	Dr.	
To	213½ yds	Remnants cloth @ 9 ½c	\$20.28	

August 20 1836

		Nathaniel S. Raymond of Hopkinton N.H.	Dr.	
To	723 lbs.	Wrot Iron Scraps @ 2 ½c	18.20	
“	562 “	” “ Card Shaft “ 3 ½“	19.67	
“	30 “	Bags & Ropes “ 2 ”	<u>.60</u>	
		Paid	\$38.47	

Lowell Jany 3rd 1836

Changed the gear in the card of tin drums on
The Warp Frames in No. 3 Mill - by taking
off the one of 15 spur teeth and putting on one
of 16 teeth. By this arrangement we are ena-
bled to run the front roller 59 instead of 55
revolutions pr. minute. Making a difference of
1 ½ Frames in the Mill.

Jany 10 Altered the twist of the filling in
No. 3 Mill by taking off the change gear
of 21 & Putting in one of 22 teeth. By this
alteration wWe are enabled to make more
filling & to run the front rollers 66 in-
stead of 64 revolutions pr. minute.

Lowell. Jany 14, 1836

Memo – No. 2 Mill.

155 ½ ft. Long & 44 2/12 ft. wide on the outside.

Jany 16

Altered the weight of the Picker Spreadings
in No. 2 Card Room from 30 to 28 oz.
We are enabled to do this by replacing the 4
Cards that were carried & used in No. 5.

August 22, 1836

Abiyah Watson

To 7 lbs Harness Twine

@ 40c

Dr.

\$ 2.80

Lowell Jany 28, 1836

Memo of Swarf Iron sent to John Fisher
To be forged into Thros. Whirls – Nov. 24 1835.

Returned 20688 Whirls =	9,628 lbs}	12091 lbs.
Do Scraps	<u>1,612</u> }	<u>11240</u> “
	11,240 lbs}	Waste 851 lbs.

Waste 7.038/1000 %
Scraps 13.332/1000 %
Waste & Scraps 20.37/100 per cent.

Memo of cost of 20688 Whirls, forged and
annealed ready for finishing - 5 66/100c each
The expense of transportation, the waste & scraps
offset each other, not being included in the above
estimate.

February 2nd 1836

The above Memo is incorrect in consequence of allowing
6 ½ c per lbs. for the Iron of which the Whirls are
made instead of 5 31/100c pr. lbs. which is the actual
cost of the Iron ordered from England.

Memo of the cost of 20688 Whirls, forged and
and annealed ready for finishing.

12091 lbs. Swarf Iron	cost 5.31c	= 642.03
9628 “ Forged Whirls	“ 3 c	= 288.84
9628 “ “ “ annealed	“ 1 c	= <u>96.28</u>
		\$1027.15

Then 1027.15 divided by 20688 = 4 964/1000 cents each whirl.

February 12, 1836

Received of Ashel Blodget of Dorchester, N.H.
26 Bags Starch – 4020 lbs inclusive of bags.

“ 29

Memo of Cast Iron in one Double-
headed Turning Engine – 2224 lbs. @ 4 3/8 c = \$97.30

Memo of Cost of materials and labour in
1 Double Headed Turning Engine – completed. Aug. 15, 1836

vis	2619 lbs	Cast Iron	@ 5c	= 130.95
	69 1/2 “	Forged Cast Steel	“ 23”	= 15.98
	215.3 “	Do Wrot Iron	“ 10”	= 21.58
	150 ft.	Lumber	“ 3”	= 4.50
	47 Days	Work by Prescott	“ 9/	= 70.50
	15 “	“ “ Tripp	“ 8/6	= 21.25
	36 3/4 “	“ “ do	“ 9/	= 55.13
	2 1/4 “	” ” Smalley	“ 7/	= 2.62
	2 ”	“ “ Folson	“ 7/	= 2.33
	3 ”	“ “ Saunders	“ 7/6	= 3.75
	1 “	“ “ Roby	“ 9/9	= 1.62
	2 “	“ “ Hibberd	“ 4/6	= <u>1.50</u>
				\$331.71

Lowell March 29, 1836

Waste made on Warpers in No5 Mill – week ending }		
March	26, 1836	= 16 ½ lbs.
April	2 nd “	= 17 ½ “
“	9 “	= 11 “
“	16 “	= 13 “

Waste made on Warpers in No. 2 mill-one week		
Ending	March 26, 1836	= 14 ¾ lbs.
	April 2 nd “	= 13 ½ “
	“ 9 “	= 12 “
	“ 16 “	= 14 “

Memo of Cost of Boiler for
No. 5 mill – sett sometime in the fall
of 1835, made by Prop Locks & Canals
2027 lbs. @ 1/ _____ \$337.83

Lowell April 2nd 1836

Memo of Power of Lever used on the Steam Boiler in No. 5 Mill.

Lever 2nd order – 7 to 1 weight of lever when hung upon its fulcrum at the place where the resistance is applied is – 12 ½ pounds – This 12 ½ lbs. with a weight of one pound on the end of lever would be = 19 ½ lbs. on safety valve or the sq. inch – the safety valve, or orifice being 1 1/8 in diam. Or = 1 sq. inch

Memo of the largest weeks work ever done in the Merrimack Mills up to this date vis. Week ending April 23rd 1836

No. 1	Mill A	Cloth 17.46 ps =	49.849 3/ yds.	10,576 lbs.
“ 2	“ H	“ 1.274 “ =	42.114 1/ ”	7,929 “
“ 3	“ W	“ 1.176 “ =	38.728 2/ “	6,280 “
“ 4	“ B	“ 857 “ =	24.100 “	6,443 “
“ 4	“ C	“ 497 “ =	14.457 2/ “	2,755 “
“ 5	“ H	“ <u>1.192</u> “ =	<u>39.417 3/</u> “	<u>7,441</u> “
		6.742 “ =	208.667 ¾ “	41,424 “

Week ending April 30, 1836

No. 1	Mill A	Cloth 1808 ps =	51.413 yds.	10,776 lbs.
“ 2	“ H	“ 1326 “ =	43.704 2/ “	8,213 “
“ 3	“ W	“ 1214 “ =	39.915 3/ “	6,453 “
“ 4	“ B	“ 880 “ =	24.754 “	6,573 “
“ 4	“ C	” 510 “ =	14.805 “	2,824 “
“ 5	” H	“ <u>1279</u> “ =	<u>42.050 3/</u> ”	<u>7,853</u> “
		7017 “	216.653 “	42,692 “

Lowell. April 11, 1836

Memo. The water in the Merrimack River commenced rising on Sunday April 10, 1836. and rose to the height of about 10 ft. above the ordinary level, and within 19 in. of the top of the cap stone on the wall at the end of the raceway in the rear of No.1 Mill.

On Monday evening, April 11, the water was at the highest point; the wheel in No. 1 Mill running in 8 ft. of Water.

In consequence of this great rise of water, our No. 1 - 4 - 3 Mills did not run their usual speed: and we were obliged to stop a part of the Card and Spinning Rooms in No. 1 & 4 Mills. The Lawrence Mills all but No. 5 were obliged to stop.

This great rise of water was caused, in part, by a high, warm, south wind for about a week previous – melting away the snow and ice on the hills and mountains in N.H. On Sunday, it commenced raining & continued until the afternoon when it cleared off cold. The water continued to rise, after the close of the rain for about 30 hours, when it began to fall.

S. Adams

Lowell. April 9. 1836

Memo of Labour and Materials in
 264 Sett of Loom Harnesses (3 leaves in a sett) made
 to the order of the Prps of Locks and Canals for
 the Boott Mills. No. 1

vis.

178 lbs.	Harness Twine -	@ 40 c	71.20
15 Galls.	Japan Varnish -	" 1.25 "	18.75
	Knitting 13.266 beers -	" 1 "	132.66
	Learning new hand		1.50
	Varnishing & Brushing - 52 days	" 1.50 c	78.00
	Picking open eyes - 25 "	" 50 "	12.50
6 lbs.	Tallow	" 9 "	.54
2 "	Bees wax	" 35 "	.70
			<u>\$315.85</u>

Then 315.85 divided by 13.266 = 238/100c per beer
 Then 315.85 divided by 264 = \$1.196/10 per sett, on
 Harness, not including the Shafts.

Jany 7. 1837

Memo paid for No. 1191 - 5 L.R. 50 c for wire
 " " " " 430 - 2 do 50 " " "

Lowell. Jany 24, 1838.

Mess. Thayer & Pitcher (Pawtucket R.I.) Dr.
 To 30 ¼ lbs. Cotton Banding - @ 50 c \$ 15.13

Lowell April 9, 1836

Memo of Labour & Materials in 88 Sett of
Loom Harnesses – (3 leaves in a sett) made to the
order of Mr. French, for Boott Mills. No. 1

vis.

528	Harness Shafts	@ 3 1/10 c	16.37
60 lbs.	Do Twine	“ 40 “	24.00
5 Galls.	Japan Varnish	“ 1.25	6.25
	Knitting 4422 beers	“ 1	44.22
18	Days work varnishing & brushing	@ 1.50	27.00
8	Do do Picking open eyes	“ .50	4.00
2 lbs.	Tallow	“ 9 c	.18
1 “	Bees wax	“ 35 ”	.35
	Learning new hand		<u>1.25</u>
			<u>\$123.62</u>

Then 123.62 divided by 88 = \$1.40 1/2 per sett

Then 123.62 divided by 4422 = 2 8/10 c per beer
including harness Shafts.

May 14th 1836

Memo moved in 4 Cards into No. 1 Carding
Room that have been altered from narrow to
wide cards. May 16, commenced grinding the
same. It is probably the alteration will be com-
pleted in the course of 6 or 7 months.

Oct. 15, 1836

Completed the alteration this day in No. 1 Carding
Room – being 5 month since we commenced the al-
teration of Cards in that Mill.

Lowell. May 2nd 1836

Memo of lathing & plastering the attics of No. 2 & 4 Mills

No. 4 Mill

153 ft. long

44 “ wide including both sides

Then $153 \times 44 = 6732$ ft. divided by 9 = 748 yds. @ $8 \frac{1}{2}$ c = 63.58

No. 2 Mill

$153 \frac{1}{4}$ ft. long

53 “ wide including both sides

Then $153 \frac{1}{4} \times 53 = 8122 \frac{1}{4}$ ft. divided by 9 = $902 \frac{1}{2}$ yds. @ $8 \frac{1}{2}$ c = 76.71

Total cost of Labour for both mills

\$140.29

May 23rd

Received of Locks & Canals for No. 2 Boott
Mills – 1368 Harness Shafts.

Memo the size of the wooden houses on

This Corporation is as follows to vis.

$41 \frac{1}{2}$ ft. long – $31 \frac{1}{3}$ ft. wide, on the outside

Memo The waste House in the Merrimack Yard, took fire, it is supposed, by spontaneous combustion about 11 o'clock on the Evening of May 13, 1836, which was entirely consumed, with nearly all its contents, consisting of from 12 to 15 tons of waste of various kinds, estimated at about \$6.00.

Mr. Carleton, the contractor for the thread, And other poor waste, pays for 7 tons = \$210. The company of course loose the remainder, together with the Building.

The following hands who laboured nearly all night in extinguishing the fire, have been allowed for their services the amount of a days labour vis.

Phinehas Adams
Humphrey S. Watson
Asa Hildred
Comodror Mowatt
Seth Chillis

William Upham
Lewis F. Gitcomb
Mr. Batchelor
“ Moore

May 25.

Memo – all the watch Clocks in the Mills were cleaned this day. Also – the Clocks in Mr. Bootts And Mr. Clark's Rooms were cleaned.

The watch Clocks should be cleaned at least, once in 6 months.

Lowell June 15, 1836

Memo commenced on the alteration in No. 2 Spinning Room this day – that is, by putting in new wrought iron whirles, changing the spindles and putting in small Spindles that have been ground over.

June 30, 1836

In consequence of the warm & damp weather & the bad state of the Throstle Frames in No. 2 Mill we reduce the size of the yarn from No. 29 to 28 $\frac{4}{10}$. This will give the Wt. of the beams in the Dressing Room 130 lbs. instead 127 $\frac{34}{100}$ lbs. as formerly. This alteration is to remain until the Frames are altered, which is now in process.

July 28th 1836

Memo Completed this day moving & starting of warp Throstle frames, from No. 5 Spinning Room to the Dressing Room. 17 days labour

August 5, 1836

Increased the speed of all the Drawing Frames in No. 5 Mill 17 $\frac{1}{2}$ pr. cent. This, we think will be sufficient to make drawing enough to supply the present Speeders & the Speeder that is to be put in thereafter.

August 10.

Increased the speed of no. 5 Cards from 85.78 to 90 revolutions of main Cylinder pr. minute. This increase is made in order to keep up with the Drawing.

Lowell Aug. 6, 1836

Memo of wrot Iron Furnace received of
 Props Locks & Canals
 vis. 1093 lbs. @ 1/pr. lb. = \$ 182.17
 Mr. Ashton has for making the above 2 c pr. lb.

August 17th 1836

Completed this day moving 7 Filling Throstle
 Frames from No. 5 Lower Room into the upper
 Spinning Room – 18 days labour –

The Spinning in No. 5 Mill is now completely
 repaired. And is doing the best & most work
 ever done in that mill since the alteration
 from No. 40 to 30 yarns.

August 27, 1836

Set in No. 4 Mill the new wrot Iron Furnace
 made by Process Locks & Canals. This Furnace is set
 on the south end of the mill.

September 1836

Memo of Expencc of repairing No. 4 Mill
 Water Wheel Shaft.

vis.	2200	lbs.	Cast Iron	@ 5 c	100.00
	280	“	Forged	“ 10 ”	28.00
	21 ¼	Days	Work of mechanics		27.85
	10	Do	“ “	Yard Hands	<u>10.00</u>
					<u>\$175.85</u>

Lowell Sept. 9, 1836

Pittsfield Manfg. Co.				Dr.
To	4	Harness Brushes	@ 50 c	\$ 2.00

Oct. 18 1836

V.T. Sprague – High Bridge Factory				Dr.
New Ipswich N.H.				
To	32 lbs	Cotton Banding	@ 40 c	12.80
To	5	Speeder Bobbins – to be returned		

Oct. 19

Methuen Manfg. Co.				Dr.
To	41 lbs	Cotton Banding	40 c	\$16.40
To	6	Speeder Bobbins – to be returned		

Nov. 26, 1836

Mr. John Smith of Andover				
To	11 ¼ lbs	Cotton Banding	@ 3	\$ 5.63
	2	Bobbins - to be returned		

Jany 5, 1837

Shephard Briggs				Dr.
To	4	Set old Card Clothing	\$ 7.50	

Jany 6, 1837

Sylvanus Adams				Dr.
To	32 ¼ yds	B. Cloth damaged	@ 12 ½ c	\$ 4.03

“ “

Rufus Whittier				
To	125 yds.	B. Cloth damaged	@ 12 ½ c	\$15.63

Lowell Oct. 11, 1836

Sent Mess. Ira Gay – for No. 2 Sping Room
598 Filling Spindles to ground over like
those last round over-

Oct. 13 Altered the length pieces of B & C Cloth
in No. 4 Mill, by changing the gear on the
Clocks of the Dressing Frames, from 68 to 72 teeth.
This alteration is made at the request of our selling
Agt. Mr. Page, of Boston.

Oct. 15 Memo of alteration made in the quantity of
yarn put on the C. Section Beams – No. 4 Mill
vis. from 10.000 to 11.000. yards. with 10% added
the actual measurement is - 121,000 yds. And
the Section Beams weigh – 115.23 lbs. pr. beam

“ “ Alteration made in the No. of yarn of
No. 2 Mill – from No. 28 $\frac{4}{10}$ to No. 29. The weight
of Section Beams, then, will Stand 127.34 instead
of 130 pounds.

Nov. 26 Memo Reduced the yarn in No. 1 Mill
from No. 21. to No. 22. This will make
the weight of Section Beams – 107 $\frac{14}{100}$ lbs.

1837

Feb. 9 In consequence of having changed the gears
on No. 3 Thros Frames, and otherwise increased the
Speed, I find it necessary to increase the Speed
of the Double Speeders 10% by laying up the pulley on
main drum from 25 to 27 $\frac{1}{2}$ in dia. Giving 152 turns f. roller.

January 7, 1837

John Barrett				Dr.
To	32 yds	B. Cloth damaged	@ 10 c =	\$ 3.20
		“		
Cyrus Tyler				Dr.
To	32¼ yds	Cloth damaged	@ 10 c =	\$ 3.25
		“		
Seth Chellis				Dr.
To	30½ yds	Cloth damaged	@ 10 c =	\$ 3.05
		“		
Stephen Cushing				Dr.
To	32½ yds	Cloth damaged	@ 9 c =	\$ 2.79
		“		
William Upham				Dr.
To	31 yds	Cloth damaged	@ 9 c =	\$ 2.79
	9			
William Studley				Dr.
To	65¼ yds	Cloth damaged	@ 9 c =	\$ 5.87
	Feby 7.			
Norton Cotton Mill Co.				Dr.
To	10	old Doffer Fillets	@ 6/	\$10.00
		“		
Mr. Morse				Dr.
To		old Scrap Leather		.40 cts.
		“		
Moses Whittier				Dr.
To	14 lbs	Waste yarn No. 40	@ 9 c	\$ 1.75
March 2 nd		Loom No. 336 - No. 2 Upper Room		Dr.
To		Cash pd. for 1 wire wove into the cloth.		.50

1837			
March 15.	Shepard Briggs		Dr.
To	3 Main Cylinder Fillets @ 8 c =		24.00
March 25.	D. M. Walker – New Ipswich		Dr.
To	8 ¼ lbs. Coarse Cotton Banding @ 50 c =		\$ 4.12
May 1	Marband Manufg. Co.		Dr.
To	6 lbs. Cotton Banding @ 50 c =		\$ 3.00
May 23.	Mess. Prescott & Wright		Dr.
To	1665 lbs Wrot Iron turnings @ 1 c =		\$16.65
To	3117 “ “ “ Scraps “ 1½ c		<u>46.75</u>
			\$63.40
July 7.	Nathan Cheney of Weare, N.H.		Dr.
To	8 ½ lbs. Cotton Banding @ 50 c =		4.25
“	1 Speeder Bobbin for do “ 6 ” =		<u>6</u>
			\$ 4.31
Sept. 26.	Shepard Briggs		Dr.
To	3 Old main Cylinder Fillets @ 3 c =		\$ 9.00
Oct. 4.	Mess. Morison, Robertson & Fox		Dr.
To	11 ¼ ft. Small Drum @ 6/		11.25
“	54 ½ lbs Cast Iron Hangings @ 6 c		3.27
“	4 “ Composition Boxes for do @ 28 c		<u>1.12</u>
	Rec'd <u>15 Dollars</u>		\$15.64
Dec. 12.	Shepard Briggs		Dr.
To	4 old main Cylinder Fillets @ 9/		\$ 6.00

January 14, 1837

Memo Received from Machine Shop for
No. 1 Mill, and placed them in the Card'g Room
2 Double Speeders &
3 Stretchers. I suppose it will take 2 weeks
to start them, and nearly 8 weeks to start the
whole Room.

Janv 2nd 1837

Memo Moved out 12 looms from No. 1 4 Mill
6 from each room. I calculate it will
take until the first of May next to complete
the mill – of 150 wide looms.

March 8. Memo Completed starting No. 1 Speeders
& Stretchers for No. 1 Mill this day – it being
8 ½ weeks since we commenced.

April 29, 1837

Memo Completed the alteration of No. 4 wide
Looms – having finished them about the time
mentioned in my memo of Janv 2nd 1837.

July 14, John Smith				Dr.
To	8 lbs	Cotton Banding	@ 50 c	4.00
April 18				
To	19 “	“	“	“ 50 c
		Paid July 14		<u>9.50</u>
				\$13.50

Memo of Articles furnished for double
Speeders & Stretchers for No. 1 Mill

1575	Speeder Bobbins	
900	Do Skewers	
14,700	Stretcher Bobbins	
6yds.	Clearer Cloth	
6 ? 4 oz.	Tacks for clearers	
	Painting Speeders & Stretchers	2.00
1	Window Cord	1.25
60 lbs.	Belt leather	
	Charged – March 25. in a/c.	

Lowell. Dec. 1. 1837.

Memo delivered to Strafford Man'g Co.
Merideth N.H.

27	Levers	}
27	Sturups) Articles for 3
27	Top Saddles) speeders which
27	Bottom do	} which are to be de-
27	Front Top Rollers	} lievered the first
54	Back & Middle do	} sleding if sent
2	Speeder Bobbins	} for.
3	Change Gears - 53 Teeth	
3	“ “ - 55 “	
3	“ “ - 57 “	
3	“ “ - 59 “	

Lowell. Jany 28, 1837

The anchor-ice commenced making in the River and in the Merrimack Canal. about four or five weeks since which remained at the bottom until the canal was completely closed. And so much obstructed the passage of the water that our mills would not run speed, with all the machinery in operation. The Print Works have not been in operation for several weeks, except during the night from the cause above mentioned.

This morning we have stopped all our mills, and commenced clearing the ice from the Canal by cutting it up & floating over our Rolling Dam, which has just been finished, into the River.

The Ice, we find, averages from three to four feet thick: and in many places, it is frozen to the bottom of the canal, so that when it rises, it brings up, to the light of day, mud, and, in some instances, stones.

February 1, 1837

We have this day completed the work we commenced Jany 28. Having cut up all the ice in the canal, from the Print Yard to the machine Shop Dam, and floated it into the River, occupying, Saturday, Sunday, 1/2 of a day on Monday, 3/4 of a day, on Tuesday, & 1/2 of a day on Wednesday in all 3 3/4 days.

We had at work during the whole time, about 150 hands, including, all the hands in the Print Works, & the most of our overseers; all of whom, particularly our overseers, worked very hard; thereby doing great credit to themselves

and much good to the company.
Our Girls in the Mills we paid for 3 days
work, at 50c pr. Day, that being nearly the time
they were out of the mills.
The estimated expence of the work, made by
Mr. Clark, the Superintendant, is from three to
four thousand dollars.

February 3rd

The anchor-ice commenced forming in our
Canal again last evening. For the second time
this season, and has troubled us, more or less,
all last evening & through the day today.

February 4. P.M.

The canal is now closed over, and the severity of the weather
very much abated, with signs of snow: the anchor-
ice had done forming and we run our Mills with-
out any difficulty.

S. Adams

1837

July 25. About 3 o'clock this afternoon one of
the Main Drum Shafts in No. 2 Carding Room
broke in the bearing. We immediately found that
that we had a spare Shaft on hand which we
sent to the Machine Shop. Mr. Paull, worked all
night upon the Drum and got it completed early
in the morning. July 26; and, by considerable effort
we got the Drums up and ready to operate by 7 ½
o'clock A.M.

1837

April 29. Memo of Iron Bars furnished by L. & Canals
to clear the Canal of ice, in Feby last
Iron furnished by Props Locks & Canals 3761 lbs.

Iron found by L&C in Feby	595 lbs.
Do “ “ Mr. Shattuck in Feb.	879 “
Do “ “ Shattuck & Richards, Apr. 23 rd	<u>2365</u> “
	3839 lbs.
	Deduct <u>3761</u> “
To be char'd to L&C	78 “

May 1 Noah Blood, of Dunstable, furnishes
us with fine charcoal, if wanted. at 10 c
pr. bushel. Letters sealed with blue or
black wafers, directed to Dunstable Mass.

May 13. 1837

The Superintendant having had orders from
the Directors to stop No. 4 Mill, Mr. Clark
on the 19 of April issued instructions to the
Overseers to stop the Mill as soon as practa-
ble. The proccess of winding up was then com-
menced by stopping half of the Carding &
Spinning Rooms. Stopped the last loom
and shut down the gate this morning
May 13th. It is supposed we shall be
about 6 months in repairing the Mill & getting
ready to start again. That is – we must
get the mill started by the 1st. of Nov. next.

Lowell. May 6, 1837

Memo Delivered to No. 1 Mill – Dressing Room
4673 lbs. Undressed Warp – to be changed to the Mill
in the a/c of Stock in Oct. 1837. & to be Cr. No. 4 Mill.
Also 336 ps. Dressed Warp Delivered to No. 1 Lower Room
and wove into C. Cloth, & no change to be made there-
for.
294 pieces Cloth wove in No. 1 Lower Rooms
from No. 4 C. Warp. To be changed to No. 1 &
Cr. to No. 4 Mill, when the a/c of stock is
taken in Oct. 1837.

Lowell. June 10, 1837

Memo Moved 8 Looms out of No. 2 Mill to
be repaired. It is supposed it will take about 4 months to com-
plete the alteration, or until the 10. of Sept.

Lowell Aug. 21. 1838

Nelson Morse (for Mess. Thayer & Pitcher, Pawtucket)		Dr.
To	40 lbs Cotton Banding @ 50 c	\$20.00
	Paid	

1838

Oct 20	Marland Manf ^y g. Co.	Dr.
To	13 lbs Cotton Banding @ 50 c	\$ 6.50
	Paid	

Lowell. May 29, 1837

Memo Expense of making 342 Set (2 Leaves in a set)
of harnesses for Boott Mill No. 2

Paid for Knitting		233.03
Twine used for Harnesses – 177 lbs. @ 50c		88.50
Varnish “ “ 15 gals. “1.25		18.75
Tallow “ “ 9 lbs. “ 9c		.81
Dressing & Brushing “ 68 days (man) “ 50c		102.00
Picking open eyes “ 38 “ (girl) “ 3/3		<u>20.58</u>
Cost		463.67

Knitting 8 Leash Harnesses 1.00		
Dressing “ “ “ 75		
4 lbs. Twine “ “ @ 50c <u>2.00</u>		<u>3.75</u>
Add		\$467.42

Memo of Expense of making 375 Set (2 leaves in a set)
of Harnesses for No. 3 Boott Mill

Paid for Knitting		251.10
126 lbs. Sea Island twine @ 6/		126.00
65 “ Merrimack “ “ 3/		32.50
10 Galls Varnish “ “ 7/6		12.50
10 lbs. Tallow “ 9c		.90
Dressing & Brushing 54 days (men) @ 1.50		81.00
Picking open eyes 48 “ (girls) “ 3/3		<u>26.00</u>
Cost		\$530.00

Knitting 7 leash harnesses 1.00		<u>1.00</u>
		\$531.00

All the above ch'd to Locks & Canals

1837

August 2. Memo found this day a log of Elm Wood, that was cut last year, in the pile of wood back of No. 2 Mill, which was sprouted the sprout is about 8 in. high. In order to test the experiment, I have place the log in the ground in front of the Counting Room door with a view to its taking root.

Lowell, Sept. 11, 1837

Memo Started No. 4 Mill this day, with the following Number of girls in each room.

vis	4	Girls in Carding Room
	3	“ “ Spinning “
	6	“ “ Weaving “
	4	“ “ Dressing “

The Mill has been stoped 4 months for the repairs we have done to it. The Repairs that have been put on the Mill, are the following, vis. New Pickers – new Lap winders. New Cars, Speeders & Stretchers. The wil- lows, Drawing Frames, Throstle Frames, & Dressing Frames, & Warpers, have been more or less repaired. The old Gearing has been taken out and New put in, and the mill driven by belts instead of Gearing. New Drums, have also been put in the mill.

We have been two months less that we antic- ipated in repairing this Mill.

Lowell. Sept. 27, 1837

Memo Shut the gate and stoped to the machinery of No. 1 Mill this day at 4 o'clock P.M. for alterations and repairs. It is supposed, it will be necessary to keep the Mill stoped about 3 months for the repairs, at the expiration of which time the mill will probably be set in operation if the times will allow it.

Dec. 9, 1837. Rec'd of Chas. C. Nichols
1350 Double Speeder & Stretcher top Rollers
for No. 4 Carding Room.

415 Throstle top Rollers – for No. 5 Mill
332 “ “ “ “ “ 3 “

Lowell. Jany 17, 1838.

Memo Commenced starting one Dressing Frame in No. 1 Mill; also started the Picker & commenced operations in the Carding Room this day.

The Mill has been stoped nearly four months since the gate, was shut in Sept. last.

Lowell, Oct. 3d 1837.

Memo Completed starting all the Looms in No. 4 Upper Weaving Rooms having been about 3 weeks in Putting them in operation. The work runs as well as could be expected considering that we are using up the old warp that was made before the Mill stopped We have now 148 Looms in operation, 6 Dressing Frames, and all the Warpers are ready to start – 2 are already in operation.

The Carding & Spinning Rooms are nearly half in Operation, and can be completed as soon as needed.

Oct. 24. 1837.

Memo Charged Props Locks & Canals

63	Set Harnesses	for No. 1 Looms at 7/6	78.75
63	Reeds = 2520 Beers	“ ” 1 “ “ 3 ¾c	<u>94.50</u>
			173.25

The cost of the above articles are as follows

vis. Harnesses 6/ pr. Set.
Reeds 3 cts. pr. beer.

Nov. 8. 1837.

Memo Commenced making the belts for No. 4 Lower Weaving Room, this day. Mr. Holland & Blanchard went into the Room at 9 o'clock A.M.

Dec. 28. 1837

Memo Commenced starting the Looms in No. 4 Lower Room this day. Three Girls were taken in to the Room for that purpose

Lowell. Nov. 7, 1837.

Memo of Waste Made on the Pickers on
each in 3 Mills, in one week ending at date
vis. No.2 Mill - 44 lbs. on 1 Picker
“ 3 “ - 52 “ “ 1 “ - for the whole mill
“ 4 “ - 49 “ “ 1 “
“ 5 “ - 32 “ “ 1 “

Lowell. Nov. 5, 1837

Memo The Factory Bell was broken this day
i is supposed by the too heavy blows from
te small Hammer by which the hour is
Struck. This bell was cast by Revere, of
Boston, in 1822 and weighed 900 lbs. at
aprice of 40 cts. p. lb, the Tongue included

Lowell. Nov. 23, 1837

Memo Rec'd this day from Revere, of
Boston. A new Factory Bell which weighs as follows
vis. Bell 1019 lbs.
Tongue 32 “
1051 “

Feby 5, 1838.

Memo Charge to Props Locks & Canals
6 Boxes & Caps (No. 1853 & 1854) and
1 Hanging No. 1850 – whole weight 193 lbs.

Lowell, Dec. 20th 1837

Memo of Experiment on No. 5 Steam Boiler
In 24 hours 428 Gallons of Water was evaporated
by the use of 715 lbs. Anthracite Coal. A moderate
Fire was kept all the time, and the water remained
at the evaporating point all the time after
once reaching it, until the end of the experiment

July 21. 1838.

Memo of Belting given to Mr. Holland to be
made for the triphammer & Fan in the Black-
smith Shop

vis.	300 ft.	Belting - 10 in wide.
	80 "	" - 6 " "
	24 "	" - 5 " "
	70 "	" - 4 " "
	25 "	" - 3 " "

Lowell July 21, 1838

Memo Sold John Crosby of Leominster

9 old	Shafts & 2 old gears (cast iron)	2000 lbs. @ 3c = 60.00
3 "	Pullied (" ")	" 5" = <u>.95</u>
	Rec'd Payment & passed the same to Mr. Goodwin	\$60.95

July 24 Memo Brooks Shattuck settled for

51 ½ lbs. Harness twine in full	@ 50c
\$25.75	
Rec'd payment & passed the same to Goodwin.	

Memo of Work & Materials done on
 2 Steam Boilers for No 1 Mill. Completed
 January 23, 1838

2	SteamBoilers – 4825 ½ lbs. @ 15 c	723.83
18,723 lbs.	Cast Iron Pipe “ 5 c	936.15
141 “	“ “ “ Knees for gas Pipe“ 5 ”	7.05
900 “	“ “ “ Bed ? Grates, etc. “ 5 ”	45.00
109 ½ “	Brass Castings “ 28 ”	30.66
42 Pair	Trace Chains “ 69 ”	28.98
42 lbs.	Coach Screws “ 12 ½”	5.25
1050	Pipe Bolts “ 4 ”	42.00
704 ft.	Gass Pipe (1¾ in x ½ in dia)@ 30 & 25c	} 200.45
	including couplings, the whole cost is	
42	Sheets Paste Board @ 10 c	4.20
50 lbs.	Forged Iron “ 9 ”	4.50
Cost of labour & materials on Gates, furnished		} 92.64
by Locks & Canals Props		
122 ¼	Days work on pipe, Locks etc.	<u>151.75</u>
		<u>\$2272.46</u>
	Recapitulation in part.	2272.46
	Add for yard hands labour, etc. etc.	<u>27.54</u>
		<u>2300.00</u>

Memo of yarn and cloth – No. 2 Boott Mills.
 336 Threads on Section Beam - 2688 threads in a webb
 Cloth 35 in. wide out of the loom or 74 threads in an
 inch of warp yarn.

9.200 yards on Section Beam – not including the
 10 pr. ct. as given by the Clocks – Average wt. 103 to 105 lbs.
 according to the a/c of Mr. Willson.

Whole number of pieces wove, week ending Apr. 28,
 1838. was 1020 ps = 34,252. yds. = 7133 lbs. With 86 picks
 of filling pr. inch. – Looms run 118 picks pr. minute

Yarn numbers, by the above weight of Section
 Beams 38.92.

	Lowell. Aug. 2 nd 1838.		
Memo	Sold Thomas Miller of Waltham		
a lot of	Scrap Belt Leather	1567 lbs. for	25.00
50 lbs.	Old Bagging for do	@ 1½ c	<u>.75</u>
	Rec'd payment		\$25.75
			<u>S. Adams</u>

Aug. 8. 1838.
 Memo Loaned Boott Cotton Mills
 3 lengths ¾ in. dia. Gass Pipe – Returned

Lowell. Friday. Aug. 10, 1838

Memo The Water Wheel Shaft in the west end of No. 2 Mill inside-broke this morning when the Wheel started on, in the hub in the inside. We were obliged to make a new pattern, which we have accordingly commenced. [section crossed out]

Lowell. Friday Aug. 10, 1838

Memo The Hub in the water wheel in the west end of No. 2 Mill – inside – has been broken for some length of time and mended. This morning we discovered that the rent in the hub had become so bad that it was unsafe to run the wheel longer. We therefore have stoped the wheel for the purpose of repairs. The Shaft we find so badly worn that it is that expedient to put in a new one. Not having any pattern made, we have commenced making new one.

Thursday morning, Aug. 23, 1838

We have this morning completed the repairs on the Water Wheel in No. 2 Mill, and have accordingly started the wheel.
The following is the cost of labour and materials on the repairs, as nearly as they can be ascertained.

Lowell, Dec. 15, 1838

Memo Mr. Collins commenced putting in the new lays in No.4 Upper Room Looms, with iron Shuttle Boxes. This date.

1838

Sept. 28 Memo Sold Mess. Jonas Kendall
and sons of Leominster, Mass.

2	Catch couplings	73 lbs.
1	Shafts – 10 ½ ft. long – 2 ½ in. sq.	408 “
1	Bevil Gear 22 teeth	120 “
Do	do (Rim) 57 teeth	<u>346 “</u>
	Ch'd in a/c.	947 “ 3c 28.41

1838

Jan 25	655 lbs. shafts @ 3c	<u>19.65</u>
	Paid	48.06

1838

Oct. 3. Memo Sold L. Peters, of Paris, Tennessee

1	Double Speeder – 28 spindles	150.00
1	Finisher Card and filleting	50.00
1	Set filleting cards	5.00
700	Speeder Bobbins @ 3c	21.00
500	Hollow Skewers (wood) “ ½”	2.50
35 lbs	Iron Skewers “ 8”	2.00
	Boxing the above	<u>14.00</u>
		\$245.50

Rec'd payment.

S. Adams

1838

Oct. 5. Cheshire Manf'g Co.

To 12 lbs.	Harness Twine @ 50c	Dr. 6.00
“ 3 sets	Card filleting @ 5\$	<u>15.00</u>
	Rec'd Payment	\$21.00

S. Adams for Agt

Lowell. March 2, 1839

Completed this day putting in new Lays into
No. 4 Upper Room Looms, being 2 ½ months in altering.

1838
 Nov. 15 Memo Sold Erastus B. Bieglow of
 Lancaster Mass.
 10 Breaker Cards with clothing @ 50\$ 500.00
 1 Drawing Frame 60.00
 1 Tin Grinder 5.00
 6 Do. Cans – 10 in. dia. 4.50
 \$569.50

Rec'd Payment S.A.

1838
 Nov. 15 Memo Sold Weare Cotton and Woolen
 Manuf'g Co. (Nathan Cheney Ag't)
 4 Finisher Cards & Clothing @ 50\$ 200.00
 1 Tin Grinder 5.00
 4 Card Pullies 43 lbs Cast iron @ 3c 1.29
 206.29
 Rec'd one hundred & fifty dollars 150.00
 Do fifty six dollars & twenty nine cents } \$ 56.29
 by Due Bill }

1838
 No. 15 Memo of Banding sold to Forest Eaton
 10 lbs. Banding @ 50c Paid 5.00

1839
 Jany 10 Chelmsford Glass Manf'g Co. Dr.
 For 1885lbs Broken Glass @ 1½ c 23.77

John Templeton of Cambridge St. Boston
 is to furnish 4 marble hearths for the "Adams
 Block" at 75 cts. per sq. foot.

Lowell. Dec. 26, 1838
 Memo Sold Jabez Edwards 65 ¼ lbs. Brass
 Castings for 13 watch clocks at

John Templeton, Cambridge St. Boston, is to
 furnish for the "Adam's Block", Merrimack Manuf'g Co.
 4 Marble Chimney pieces – of the following dimensions
 Shelf 5ft. 4 in. long - Opening 3ft. 2in.wide – 2ft. 8 ½ in. high
 The 4 to be del'd & putup here in Lowell for 38\$ ea.

Henry T. Butler – No. 32 Union St. Boston is to
 furnish 4 Grates – 2ft. 9 ¾ in. high – 3 ft. 4 ¾in. long.
 Opening 16 in. wide. Also 4 Grates 12 in. opening -
 2 with fixtures & 2 without – the whole 4 to be
 furnished for 100 dollars.

Lowell March 15, 1839
 Memo Sold Mess. Otis & Shepard Briggs

1 wood	Grinder Cylinder		3.00
18 ½ lbs.	Old belting	@ 1/	3.08
1 Cast Iron	Shaft & coupling 193 lbs.	" 5 c	9.65
1 Drum	8 ft. long	" 75 "	6.00
2 Do	13 " " 26 ft.	" 70 "	18.20
1 Do	8 " "	" 75 "	<u>6.00</u>
April 13.	Rec'd Payment	<u>S. Adams</u>	\$45.93

Lowell. March 22./39
 Sold Mess. G. & N. Sturdivant of Boston

4935 lbs.	Wrot Iron Scaps	@ 1½ c	\$ 74.03
	Rec'd Payment	<u>S. Adams</u>	

Lowell. Jany 30, 1839

On Saturday, Jany 26, it commenced raining about 9 o'clock A.M. and rained considerable during the day. In the evening the wind commenced blowing a violent gale from the South East. The wind & rain subsided during Saturday night and on Sunday the weather was quite cold.

In consequence of the heavy rain, and the melting of the snow on the hills and mountains of N.H. the Merrimack river rose to the unusual height of about 10 ft. above the ordinary level below Pawtucket Falls. The water, at the heighest point, was up to the bottom of the Cap Stones at the lower end of the raceway of No. 1 Mill, and our water wheels run in about 8 ft. of water.

The anchor-ice formed with such astonishing rapidity and came down the canal in such masses that we were obliged to stop our mills and back up & flood it over the dam, which we were enabled to do in about 6 hours on Monday. The anchor-ice troubled us considerably during the day and most of the day following. On Wednesday the water & ice had so far subsided that the mills run with but little trouble.

P.S. Many Bridges were carried }
away by the ice on the River. }

S. Adams

Memo of Sundry bills paid for work on Adams & Tuft's House.		
Gardner K. Eastman bill for hewing 177 6/10 sq. ft. of Underpinning @ 1/ pr. ft.		29.60
Alpheus Spalding's bill - 22 Chestnut Posts		12.30
John K. Binkum of Boston bill for 360 lights @18c		64.80
Cartage of the above		.75
William Bunkers bill for Cellar & Bank	}	
Wall 192 1/3 perch (Abbotts' measure) @ 9/	}	288.50
Fee for measuring		.50
Slating 45 5/12 x 41 ft. = 18.62 squares @ 8.75		162.93
Jesse Tapley's bill - 15 perch mortar stone @7/		17.50
Henry T. Britter bill		
4 Parlor Grate Frames – complete	}	
2 Chamber “ “ with fixtures	}	100.00
2 Do “ “ without do	}	
Cartage of the above		.50
2 Copper Boilers 38 lbs. @45c		17.10
5 ½ lbs. Lead Pipe for do “ 9”		.50
Extra work on the above		.75
367 lbs Copper Gutter @45c		165.15
97 ‘ Do Conductors “45”		43.65
12 ½ “ Lead Pipe for do “15”		1.88
Brooks & Fiske's bill - matching 2500 ft. boards		8.75
Horace Howards bill for Joists, Cherry wood, etc.		34.96
12 m. Shingles of Props. Locks & Canals 4\$		48.00
Jesse Colburn's bill 104 ½ ft. Thresholds	}	
Door step & Caps for cellar doors @ 45c	}	47.02
4 Caps for Cellar windows “ 1\$		
4.00		

Lowell March 22, 1839

Memo commenced this day digging the cellar
Of the "Adams Block".
Mr. Dodge commenced on the wood work
about the 10 of the present months. the underpinning
having been got out the last of February.

Memo of the prices of machines as furnished by Locks & Canals and the old machinery for sale by Merrimack Manuf'g. Co.

viz.		P. L&C	M.M.Co.
	1 Willow	110	\$ 40 repaired
	1 Picker	550	\$350
	1 Grinder	70	
	14 Breakers	ea. 280	
	14 Finishers	“ 255	
	4 Drawing Frames	“ 235	\$ 75 nearly new
	1 Lap Winder	“ 320	
	5 Stretchers 36 sp.	“ 780	\$150 18 spindles
	3 D. Speeders 18 “	“ 560	
	12 Warp	“ 485	
	12 Filling	“ 525	
	4 Warpers	“ 145	
	6 Dressers	“ 530	
	90 Looms	“ 76	\$ 40 repaired

Lowell April 5, 1839

Memo Sold John Favour (watchman at
the Lowell Manuf'g Co.)

445 lbs.	Scrap Wire	@ 4½c	20.02
209 "	Do Do	" 3 "	<u>6.27</u>
			26.29

Rec'd Eighteen Dollars of the above the
remainder to be paid tomorrow - (Paid)

Lowell April 9, 1839

Rec'd of John French of Bedford N.H.
450 Chestnut Posts (merchantable) @15c 67.50

April 15, 1839. Memo Sold Mess. Otis & Shepard
Briggs 18 ¼ lbs. old Belting @ 1/ 3.04

Lowell, April 23, 1839

Rec'd of John French of Bedford N.H.
88 Chestnut Posts (merchantable) @15c 13.20
" Do do (Poor)

Lowell, July 2, 1840

Tippecanoe Club. Ward No. 1 Dr
For 38½ yds B Cloth (remnants) @10c \$3.81
" 5 lbs Cotton "12" .60

Lowell March 1841

Mr. Williams [] the rolls for
3 ¼ cts. for one year after that for 3 cts.

Sold Charles Wilder		
Large 2 nd hand Boiler	140l @ 6c	84.06
2 Stop cocks	“ 6/	2.00
Labour on Boiler		<u>2.00</u>
		88.06

Rec'd Payment

May 28, 1842

Concluded to alter those 6 Warp throstle Frames which we have calculated to put into No. 4 L. Room to use Bobbins on all on them the same size as No. 2 Mill except the spindle [] which are to be the same size as No. 1 Mill. The above Frames are to be taken out of No. 5 Spinning room in place of which we shall put 6 new Filling Frames of a 160 Spindles each. It is also calculated to put in a Warper into No. 4 L.

April 12, 1843

The 6 new Throstle Frames for No. 5 Spinning Room which are now partly finished, are to be Warp Frames with new Flyers. The 6 Old Frames which are to be taken out of No. 5 Mill are to be put into No. 4 Lower W. Room. 2 of them to be fitted up like the Wrap Frames in No 1 Mill and the other 4 to be fitted up like the Warp Frames in No. 2 & 4 Mill.

Waste from the Weaving, Dressing & Lower W of No 2 & 5 Mills

No. 2 Mill

No. 5 Mill

1842 Weaving Dressg Lower W. Total Weaving Dressg Lower W. Total

4days

Jan 8	36	27 ¼	19 ¾	33	33	30 ¼	12 ¾	76
“ 15	44 ¼	33	21	98	38	38 ¾	15 ¼	92
“ 22	38	34	21	93	41 ½	38 ¼	16 ¼	96
“ 29	38 ½	33 ½	90 ¼	90 ¼	41 ½	38 ½	17 ¼	97 ¼
Feb 5	41 ½	37 ¾	18 ½	97 ¾	37 ½	17 ¾	15	90 ¼

Memo of Lumber Sawed at the Locks & Canals Saw Mill
from Logs bought of

Surveyed	in the Logs by Mr. Ayer	43,040
Do	after sawed (pine)	55,235
Do	for Boxes	51,692
Do	in Timber	2,013
Do	Good for Boxes	1,530

April 12, 1843

Loaned D. P. Moody 1 Loom from No.
4 Lower W. Room with every thing belonging thereto
necessary for weaving excepting Shuttles
13th Also one beam of Dressed yarn from
No. 3 Mill with Reed & Harnesses drawn in – 36 lbs. @ 1/6
12 Also 1 Extra Feed Shaft for Loom
29 Do For 10 Loom Pickers prepared for Loom 75
“ One beam of Dressed yarn from 3 Mill Drawnin }Harnesses
May 1 One “ “ “ “ “ “ “ “ }Furnishing
July 6 One “ “ “ “ “ “ “ “ } 72 lbs.

[marked PAID along the left side of above entry]

“ 19	Cotton Manufacturing Cos. Lowell	Dr.
	For Expenses to Lonsdale R. I. in starting English Picker	15.43
“ 26	D.P. Moody	Dr.
	For 1 beam dressed yarn from No. 3 Mill not draw-in & without Reed on Harnesses 12 pr. full No. 1 threads – 36 lbs.	

[marked PAID along the left side of above entry]

Prices Of Machinery & Other Articles

Cost of Loom Harnesse for No. 3 Mill – the		}
Shafts not taken into the a/c =	.91 ½ c	}
or 9 15/100 c per beer		}

Prices of Machines at the machine shop

1	Willow	(double)	\$ 115
1	Picker	“	600
1	Card	“	325
1	Grinder	“	140
1	Lap Winder	“	250
1	Drawing Frame	“	175
1	Double Speeder	(24 Spindles)	890
1	Stretcher	(26 do)	1050
1	Throstle Frame	(128 do)	600
1	Warper		140
1	Dressing Frame		520
1	Loom		76
1	Card Machine		140
1	Double Speeder	(18 Spindles)	660
1	Do Do	(12 “)	590
1	Throstle Frame	(160 sp.)	600

Memo of cost of Repairs on one Loom
 altered for Mr. Bacon of Mason Village.

Lumber		2.04
40 1/3 lbs Wrot Iron	@ 10c	4.03
5 “ “ Steel	“ 20c	1.00
2 Steel Shuttle rods	“ 25”	.50
140 1/2 lbs Cast Iron	“ 5”	7.02
20 1/4 Days Work on Iron & wood work		<u>22.95</u>
		44.51
Add 25 pr. ct		<u>11.13</u>
		\$55.64

Memo of Sundry bills paid for Labour
and Materials for the "Adams Block" - 1839

Gardner K. Eastman's bill for hewing 177 6/10 sq/ft.	}	
Underpinning Stone @ 1/pr. Ft.	}	29.60
Alpheus Spalding's bill - 22 Chestnut Posts		12.30
John K. Binkum's bill-360 Lights (cherry wood) @18c		64.80
Cartage for the above		.75
Wm Bunker's bill-cellar & bank wall-192 1/3 perch @ 9/		288.50
Joshua Abbott's Fees for measuring		.50
John Waugh's bill for slating-		
45 5/12 x 41 ft. = 18 64/100 sqs. @ 8 3/4		162.93
Jesse T. Butler's bill 4 Parlor Grate Frames complete	}	
2 Chamber do do with fixtures	}	100.00
2 Do do do without "	}	
Cartage of the above		.50
David Dana's bill 2 Copper Boilers - 38 lbs. @ 45c		17.10
5 1/2 lbs. Lead Pipe for do " 9"		.50
Extra Work on the above		.75
367 lbs Copper Gutter @45c		165.15
97 lbs. Do. Conductors " 45"		43.65
12 1/2 " Lead Pipe for do. " 15"		1.88
Brooks & Fiskes bill - matching 2500 ft. boards		8.75
Horace Howard's bill - Joists-Cherry Wood, etc.		34.96
Props. Locks & Canals for 12 m. Shingles @ 4\$		48.00
Jesse Cobburn's bill - 104 1/2 sq/ft. Thresholds	}	
& caps for cellar doors & door step @45c	}	47.02
4 Caps for cellar Windows " 1\$		4.00
Mr. Ames bill for building wood shed		<u>60.75</u>
		1109.89

Amount brot forward		1109.89
Joshua Abbott's bill		
Setting 177 ½ ft. underpinning	@ 6c	10.65
Do 52 " Thresholds	" 6"	3.12
Laying 26,000 Face Bricks	" 3\$	78.00
Do. 72,626 Common do.	"14/	169.49
Do. 9 perch mortar wall	" 9/	13.50
Sundry Extra Work, etc.		58.24
Jacob Ames bill for building fence		40.00
78,000 Hard Bricks for the whole house cellar " 7\$		546.00
27,680 Preped do " " " average cost @ 9.31		534.50
160 Lights 10x16 Glass@33c 52.80}		
200 Do 10x14 " " 26" 52.00}		
100 Do 9x12 " " 14" 14.00}18.80 dect 8%		109.30
10 Do 14x18 " " 25"		2.50
16 Do 12x18 " " 23"		3.68
2 Doz Latches	@15/	5.00
10 Window Catches	" 5/6 doz	.77
30 Do Fastenings	" 25c	7.50
30 Sets Blind Trimmings (for Brick)	" 54"	16.20
4 do do do (" wood)	" 42"	1.68
2 Tin Pipes for Boilers	" 12 ½"	.25
{John Templetons bill of Boston		
{ 4 Marble Chimney pieces	@ 38\$	152.00
{ 4 Do Hearths – 6 ¾ ts. = 27 ft.	" 75c	20.25
{32 Setts Free Stone Caps & Sills	" 15/	80.00
{ 2 Door Caps	" 27/	9.00
124 Casks Lime	" 6/	124.00
250 Fire Bricks	" 6c	15.00
5 Casks Lime bot of Sanborn	" 8/6	<u>7.08</u>
Carried Forward		3117.60

Am't Brot forward		3117.60
N.& D.	Sanborn's bill for plastering	
190 3/8 yds	Hard finished @ 12½c	23.79
1029 1/8 do	Skimmedcoat do " 10"	102.91
246 ¾ do	Smoothe do " 8"	19.74
	Extra for getting sand etc.	2.25
46,500 ft.	Lumber taken from the yard @ 12\$	558.00
10,900 "	Eastern Pine Boards & Plank @ 25 10¾	273.67
9 doz.	Window pullies 5 pr ct @ 3/	4.28
1	Cask plaster-paris	2.75
8	Lights Glass @ 1/	1.13
James L. Foot's	bill for Locks & Rosewood Knobbs	49.88
1 2/3 doz.	Brass Buttons	1.38
6 ¾ doz.	Brass Nails @ 1/	1.13
6	" Wood Knobbs " 2/	2.00
J. & D. Holts,	bill for 122 lights of sash & 2 sky lights	10.32
Butts & Screws	bot of Burbank	5.67
James H. Rand's	bill for window blinds	}
Doors, Drawers,	etc.	} 245.44
Mr. Manuels	bill for cleaning 35 Windows @ 1/	5.83
C & G. Crosby's	bill for turning, etc.	12.36
1908 lbs.	Nails, of various kinds @ 6 ¾c	128.79
616 "	Sheet Lead " 7"	43.12
300 "	Lead Pipe " 7 ½"	22.50
4	Window Lines " 7/6	5.00
4	Copper Pumps " 7\$	28.00
449 lbs.	Extra ground Lead " 10c	44.90
Charles W. Smith's	bill for building 6 Flight Stairs	118.14
Butts, Screws,	Knobbs, Hooks, Brads, etc bot of Burbank	15.69
30 lbs.	Paris Green bot of Miner & Whittemore @ 50c	<u>15.00</u>
	Carried Forward	4861.47

	Brot forward		4861.47
8 1/3 Grs.	Screws from Repair Shop av.	@60c	5.00
36 Pairs	Butts	“ “ 1/	6.00
8 m	Brads	“ “ /6	.50
10 Quires	Sand Paper	“ “ 1/6	2.50
19 1/4	Day's work by Cushing hands		25.90
624 lbs.	Forged Iron	@10c	62.40
38 1/2	Day's work, laying drains, cellar bottoms, setting grates, door Steps, etc		47.20
221 “	“escavating cellar, drains, teaming, etc		300.88
22	Bushels Hair	@18c	3.96
29 m	Lathes	“ 10/6	50.75
678 lbs.	White Lead	“ 9c	55.53
24 1/4 Galls	Linseed Oil	“ 90”	21.82
5 “	Spirits	“ 40”	2.00
35	Day's work painting by Cushing's hands@ 6/		35.00
Mr. Russell's	bill for 4 stts blinds for side lights		6.00
Joseph M. Dodges	bill for wood work		1201.47
2 Quarts	Varnish		.75
2 Do	Japan		.75
885 lbs.	Cast Iron Window Weights	@ 4 1/2c	39.82
G.L. Wilkins	bill for paper hangings		88.16
Chas Wilders	bill Boiler doors-fired stone, door rollers etc		8.49
4	Grate frames & fixture for chambers	@ 7 1/2\$	30.00
Hanging 32	Window Blinds on Brick	@20c	6.40
Do. 4	“ “ “ Wood	“ 1/	.67
108 ft.	Lumber for 2 doors	“ 4c	4.32
1 lbs.	Bronze Green		.50
5 Quarts	Oil		1.25
128 Days	work by P. F. Hall painting	@ 9/	192.00
Henry Patch's	bill for Glass Knobbs, Bells etc		<u>38.80</u>
	Carried over		7100.29

	Amount Brot Forward		7100.29
177 6/10 ft.	Underpinning Stone	@ 1/3	<u>37.00</u>
	Total cost of Houses		<u>7137.29</u>

Memo of Materials & Labour in the Alterations of Mss. Whittier & Cushing, Houses

5,000	Bricks in Cellar Bottom	@ 7\$	35.00
4,400	Do in Chimney	“ 7\$	30.28
830	Dressed Bricks	“20”	16.60
8,200 ft	Common lumber in Kitchen & Shed	“12”	98.40
50 “	White oak thresholds	“ 3c	1.50
283 “	Eastern Pine Plank	“32\$ m.	9.06
2119 “	Do “ Boards	“27” “	57.21
1500 “	Pine Lumber	“12” “	18.00
96 “	Maple & Birch “	“ 3c	2.88
	Horace Howard's bill for mahogany		9.26
7 m.	Laths	@10/16	12.25
8 Perch	Mortar Stone	@ 7/	9.33
28 Do	Cobble “	“ 6/	28.00
12 Bushels	Hair	“18c	2.16
2	Copper Boilers 57 ½ lbs.	“42”	24.15
10 Casks	Common Lime	“ 6/	10.00
7808 lbs.	White Lime	“55c100	42.94
651 “	Nails	“ 6 ¾”	43.94
135 “	Sheet Lead	“ 7 ¼”	9.45
3 “	Glue	“ 8 ¼”	.24
2	Oven doors	“12/	4.00
2	Boiler do. & Grates	“1.12	2.24
2	Copper Pipes for Boilers	“25c	.50
3 Days Work	on Pumps & Pipes (Dana)	“ 9/	4.50
56 lbs.	Lead Pipe	“ 7 ½c	4.20
1 ½ Barrels	Plaster Paris	“18/	4.50
32 Sets	Blind Trimmings & screws		14.40
4	Window Springs		<u>.31</u>
	Carried Forward		495.30

Brot Forward from last page			495.30
91 Days work Richard's hands – including team etc.			108.58
4 Doz.	Wood Knobbs		1.34
1 2/3"	Brass Buttons		1.38
1/2"	Butts		.62
110 3/4 lbs.	Wro't Iron	@ 10c	11.08
5 Quires	Sand Paper	" 1/6	1.25
7 m	Brads	" /6	.58
8 Gro.	Screws	"60c	4.80
4 Pairs	Butts	"25"	1.00
6 m.	Shingles	" 4\$	24.00
650	Clapboards	"27"m	17.55
4 Doz.	Brass Headed Nails – 6 dos. Hat Hooks		1.59
2 1/2 Tons	Hard Coal	@ 9\$	22.50
1 Cord	Hard Pine Wood – turned & sawed	" 6"	6.00
5 Baskets	Charcoal	"20c	1.00
430 3/4 Days Work on House (wood work)			559.20
Mr. Young's bill for wood work of Kitchen			145.00
110 1/2 Days work painting			
	12 days 6/ x 98 1/2 days	" 7/	126.92
1015 lbs.	White Lead	@ 9c	91.35
7 1/2 Gall.	Spirits	"40"	3.00
10 "	Linseed oil	"90"	9.00
24 lbs.	Putty	" 1"	.24
1 1/4 Gall.	Varnish	" 9/	1.87
2 1/2 "	Japan	" 9/	<u>3.75</u>
Carried Forward			1638.90

	Brot Forward		1638.90
4 lbs.	Letharage	@ 10c	.40
25 "	Paris Green	" 50c	12.50
	Painting 32 Window Blinds		" 1/
5.33			
18 Lights	Glass 8x10	" 12c	2.16
54 "	" 9x11	" 13	7.02
43 "	" 9x13	" 14c	6.02
	Mr. Colburn's bill for hammered stone		31.85
"	Frye's Bill for mason work		22.00
4	Marble Hearths		24.00
	Turning Banisters & Newels		4.80
	Sanburn's bill for plastering etc.		104.43
	Jesse Tapley's bill for sand		12.50
	Rands bill for blinds, doors, sashes, etc.		38.57
	Burbanks's bill for Locks, Knobbs, etc.		83.59
	Wilkin's bill for paper hangings		<u>50.72</u>
			2044.79

1842	William Honey		Dr.
Oct. 30			
For 2 Days	Work Team & Teamster	@ 3	6.00
1843			
April 1 "	Use of tools for moving buildings		<u>7.00</u>
			13.00
	[]		Dr.
April 25	By 63 Loads aproved	@ 6c	<u>3.78</u>
			9.22

Lowell, May 23, 1840

Memo loaned to John E. Bacon, Ag't
 Columbian Manf'g Co. Mason Village N.H.
 1 pr. scales for No. Roving.

S. Adams

1840

Aug. Memo loaned to John E. Bacon, ag't
 of Columbian Manf'g Co. Mason Village, NH
 1 Clock for Throstle Franny

S. Adams

1843

March 27	William Honey		Dr.
	For 222 ft. 3 in. planks	@\$12	2.66
	" 1,200 " finishing boards	@\$15	18
April 4	" 714 ft. 3x4 Hemlock Joist	" 10	7.14
	" 404 " " Timber	@ 9	3.63
" 10	" 180 " 3x4 Hemlock Joist	" 10	1.80
	" 952 " 3x5 Hemlock Joist	" "	9.52
	" 439 " 3x6 " "	" "	4.39
" 21	" 418 " 3x5 " "	" "	4.18
	"1,500 " finishing boards	@ 15	22.50
" 26	"3,000 " hard pine " for outside boarding		
		@\$11	33.00
" 28	" 45 " 2 in. white pine planks	@ 15	.67
May 2	" 1000 " hard pine boards for outside boarding		
		@11c	11.00
5	" 188 " 2x4 & 3x 4 joist	" "	2.07
	" 252 " 2 in. White pine planks	@12	3.02
	" 200 " Old furing	@ 6/pr	1.20
" 17	"1,500 " Hard pine floor boards planed	@14	<u>21.00</u>
			145.98

Lowell. July 8, 1840

Mess. Carey & Samford Medway
Village

Bot 1 Lap Winder at \$30.00
will send for the same in a
few weeks

1843	William Honey (continued)	Dr.
May 24	700 ft. finishing Boards @ 15	145.78
	77 " 1 3/8 Sink Stuff @ 18	1.38
	70 " No. 2 Eastern @ 4.0	2.80
	74 " 2 in. White pine plank @ 12	.89
	143 " 2x4 Furring @ 11	1.57
	64 " 1 1/4 in Hard Pine Boards " 14	.90
June 13	156 " 2 in White Pine Planks @ 12	1.87
	700 No. 1 Clapboards @ 17.50	12.25
	400 " 2 " @ 9	3.60
	18 pr 3 in hard pine @ 3 pr ft.	.54
		<u>182.08</u>

Settled July 5, 1843

1843	Chelmsford Co.	Dr.
Nov		
For 2	beams of Dress'd yarn from No. 3.	
	36 lbs. each @ 1/6	

MEMORANDA

- 1841
- July 3 Put in to No. 2 L. Room 18 New Looms except the Lathes which were in the Frames taken out
- “ 10 Put in to No. 5 C.R. an old speeder (from store house back No. 4) to run while repairing ‘Strut?’
- “ 12 Started the 18 looms in No. 2 L. – run well
- “ 13 ¼ past 5 A.M. Main Drum Shaft in L.C. broke [] to start next morning.
- “ 17 Put in to No. 3 CR. Two new drawing Frames (making six in all)
- “ 18 Put new Jack Wheel on the fly Wheel Shaft in place of the one broken and on the same place where there has been 4 or 5 others broken
- August 12 Commenced starting 6. Cards with wooden cylinders-bought of Boott Cotton Mills
- 13 11 o’clock A. M. the large Main Gear attached to the Main Jack Wheel Shaft in No. 5 Mill Broke so we were under the necessity of putting in the new spare shaft gear & jack wheels which was done in time to start the next morning – Aug. 14
- 1842
- Thanksgiving Day No. 24 –
Altered the Drums in 2 L. on the half next to No. 1 Mill by putting in Gears to increase the speed of the Main Wheel
- Dec. 31 Commenced the alteration in the warp in No. 4 Spinning Room to use Bobbins like No. 2 Mill
- Memoranda

Memo of Lumber sawed at Props L&C Saw Mill
 from logs owned by MMC

1842 Date	Box Boards	Better Quality	1 ¼ inch Boards	2 inch Planks	Timber	6in Timber
Dec 16	12,686	2,587			1,451	
“ 27	13,229	3,124		90		
1843						
Jan 10	4,664	1,102	793	206		
“ 14	3,653	520		2,480(2½)		
“ 19	9,094	1,464	2,412	4,272		
“ 24	7,064	1,061		1,472		
Feb 28	7,817	1,313				
March 4	12,906	1,438				
“ 8	11,267	792	4,886	9,602(2½)	3,432	1,053
“ 20	5,566	220				
April 13			1,874	4,747(2½)		534
	87,946	13,621	9,967	22,869	4,883	1,587
May 8		200	4,409	906		
				3,660(2½)		
“ 12	8,327	1,027	250	515(2½)		
	96,273	14,848	14,624	27,950	4,883	1,587
16,800 in our yard						

Memo of labour & Materials in Grading, building
Fence etc around the yard to Mr. Clarks house

	P.L. Folsom Bill for Fence & Edge Stone		136.62
	Burbank & Chase Bill for Hardware		5.56
	Coburns Bill for Stone Posts & Edge Stone }		
	Iron on Fence }		49.68
	Sharpning		2.04
46 lbs.	Brimstone	@ 5c	2.30
2,310 ft	Eastern Lumber	"40	92.40
300 "	Boards "11	3.30	
7	Cedar Posts	"30c	2.10
	Carpenters Labour		184.71
100 lbs.	Paint	" 9c	9.00
	Labour of Richard hands		186.68
40	Perch Stone	@ 3/	20.00
5,000	Bricks	"\$.50	<u>27.50</u>
			721.89

Memo of Materials & Labour in repairing Mr.
Clarks House, formerly the "Parsonage"

	PL Folsoms bill for stone for portico	46.17
	E. Fifields " " Building Poricos & Doors	85.17
	D. Danas " " Cooking Range, Furnace etc	206.12
	French & Dustin Bill for shutters etc	
1,554 lbs	Castings for Gutters & Water pipe @ 3c	46.62
	Burbank & Chase Bill for Hardward etc	77.92
	Iron used on house	18.60
	Waughs bill for hangings	
	Bill for Marble Fireplaces	
	" " Locks & Knobs	
	" " Paper Hangings	
	" " for Hanging Paper	
	W. Livingston's bill for lime & cement	36.47
2,396	Pressed Bricks from Livingston's	26.35
214 lbs	Sheet Lead @ 4½c	9.63
"	" " (used by Waugh)	
687 "	Lead pipe (old-from the yard)	25.75
447 "	Nails @ 4½c	20.11
	Glue White Wash Brushes etc.	6.75
8,000	Common Bricks from yard @ 6	48.00
600	Pressed " " "	9.60
4,000	Chimney " " " @ 4	16.00
	Glass	35.14
1½ Galls	Varnish @ 19c	2.62
8,022 ft.	Lumber @ 10	80.22
2,593 "	Eastern Lumber for Portico etc @ 25	64.82
300	Clapboards " 16	<u>4.80</u>
		866.86

	Amount brot up		866.86
10 m.	Shingles	@ 3.50	35.00
441 ft.	Black Walnut	“ 5 ¾	25.35
	Carpenters Labour		585.15
	Labour of Painters		144.00
711 lbs	Paint	@ 9c	63.99
3,500	Laths	“ 9/	5.25
	Labour of Richard’s hands		<u>107.33</u>
			1,832.93

Experiments with belts of different thicknesses
on 2 pulleys

Dia. of drives – 188 = 11 5/8 inches
“ “ driven 27/16 = 1 11/16 inches

With a belt 3 in. thick the driven revolves 58 ¾
times while the driver revolves 10 times

With a belt 1/8 in. thick the driven revolves 61 ½
times, to 10 of the other. With the grain of the belt
next to the pulley, and with flush ride of the belt
next to the pulley 63 ½ revolutions –

With a belt 1/25 in. thick the driven will revolve
67 ¼ times, to 10 of the other

Making a difference of Speed of 8 ½ turns

Memo of Materials & Lober in English Machinery			
1843	For J. L. Cheney's & Mr. Wragg's		
July 19	expenses to Lonsdale R.I. in		
	Starting English Picker		15.43
Sept 2	" J. Clark's expenses to Manchester		2.50
	" W. Wright do to Boston to		
	look after machinery		6.12
Oct 12	D. Danas Bill for Making 150 8 in.Cans		175.00
	@ 1/6 & Stock @ 7/		
Oct 20	" " " " " 50 9 in. "		66.67
	@ " & Stock @ 8/		
	Tin Plate for 200 cans		
91 lbs	Brass Castings from Danas	@28c	25.48
1,149 "	Iron "	" 4"	45.96
585 "	" "	" 3"	17.55
	E. Douglass Bill for Bobbins viz.		
1,200	Skewers	" 1¼c	15.00
858	Speeder Cylinders	" 1½c	12.87
5,380	Stretchers "	" 1¼"	67.25
8	Copper for Pans 652 lbs	" 33	275.16
5	days of team & teamster	18/	15.00
30	" " Yard Hands	5/	25.00
	Card clothing for English card		34.08
1,899 ft	Lumber on Picker	" 13	24.69
266 "	" "	" 3c	7.98
148 "	" for can bottoms	" 16	2.37
1 m	Shingles		4.00
50 lbs	Nails		2.50
4¼ Galls	Varnish	@ 2	8.5
10 "	Oil	" 8c	8
4 lbs	Glue	/9	.50
			<u>797.61</u>

	Amount Bro't forward		797.61
	Labor of Cushings Hands		1,069.50
	Covering & Repairing Rollers		142.46
12 yds	Cloth for Cleaners	@10/6	21.00
4 "	" " " "	" 5/	3.67
6,000	Stretcher Cylinders (first lot)	"10	60.00
2,000	Speeders " (" ")	"12.50	<u>25.00</u>
			2,119.24
	136 days extra for one hand in the room in starting @6/		<u>136.00</u>
			2,555.24

Expense of Building 7 Spinning Frames, 5 Warp & Flyers }
 160 Shuttles ea }

6,306 lbs	Castings	at 4c	252.24
1,466	“	at 3c	43.98
4,666	“	2¼c	104.98
Locks & Canals Cos. Bill for L. & F. & J. N. Plats			249.76
1,260 lbs	Cast Steel	@12c	151.20
3,136	Wrought Iron	@ 4c	125.44
2,100 ft	Lumber	@ 3c	63.00
Job Work in Rollers (by I. Blood)			126.00
Do	“	“ Spindles (“ Davidson) 11.20 @ 4½c	50.40
		Labour of Day Hands	586.70
1,120	Flyers	@14c	<u>156.80</u>
			\$1,910.50

Cost of building Wellman's Patent Self-Stripping
Card.

1853			
March		C. E. Cushing's bill for making Drawings	78.17
"	22	Lowell Machine Shops bill for making Pattern	121.35
		449 lbs Castings from LMS Sides & Spiders @49	17.96
		64½" Brass " " "	" 40 22.67
April	30	LMS Bill for cutting Segment Gear	2.61
		" " " Finishing Quadrant & 3 Spiders	11.35
		" " " Labor on Arches for Pennington's	10.41
Aug.	18	C.E. Cushngs bill for making Drawings	28.25
"	27	56 1/8 ft. Card Clothing @ 75	42.09
May	4	LMS Bill for planing card sides	3.30
"	31	" " " Gear	4.00
July	12	" " " Cutting 3 Gears	6.00
"	"	" " " drilling Mangle Wheel	5.37
"	22	" " " 5½ lbs. chain links	1.94
Aug	6	" " " finishing segment	9.48
Aug	11	" " " altering patterns	4.53
"	26	" " " 1 pr. swivel grinder stands	4.50
Sept	15	" " " 1 lbs. spur gear chain links	.37
		Howe & Goodhues bill for card clothinG	20.
1854			
Dec	13	Pennington's bill for Graining	3.00
		1,346 lbs. cuttlings @ 4c	53.84
		Labor	368.87
		Wrought Iron	27.12
		Cast Steel	6.90
		Lumber	24.00
		Painting	<u>10.00</u>
			\$868.08

Cost of building three of Wellmans Patent
Self-stripping cards

1854

Jan 27	For LMS Bill for planing card sides	3.57
Mar 18	“ “ “ “ 3 cylinders	133.03
“ 24	“ “ “ “ making patterns	85.09
	“ “ “ “ cutting 3 Segment gears	1.67
	“ “ “ “ 3 Gro. Screws	2.37
	“ 225 lbs Brass Castings from D. Dana's	78.75
Febs 2	“ C.E. Cushing's bill for droughting	105.40
Sept 28	“ “ “ “ “ “ to date	81.00
Oct 31	“ Howe & Goodhues Bill for card clothing	120.00
	“ 1 lbs Brass castings	.00
	“ 2½ lbs “ “ from LMS	.00
	“ 17 “ Spur Gear chain links 3/9	10.63
	“ Turning mangle wheel at LMS	16.50
	“ Drilling index “ “	5.87
	“ Making patterns	6.33
	“ Crane's bill for making patterns	44.77

1855

Jan'y 4	“ C.E. Cushing's Bill for making drawings	00.00
1854	“ Penningtons Bill for Graining	8.00
Dec 13	“ 5,600 lbs castings @ 4½c	252.00
1855		
Aug 11	“ 15½ lbs Chain links @ 3/9	0.00
	“ 750 lbs Wrought iron	75.
	“ 136 “ Cast steel	16.32
	“ 1100 ft Lumber	55.00
	“ Painting	20.00
	“ 199 Days labor @ 1.50	298.50
	“ 131 Days labor @ 1.40	183.40
		<u>\$1,693.20</u>

Cost of altering 2 of No. 6 cards to attach
Wellmans patent self-stripping apparatus

1853	For Crane's Bill for making patterns	78.04
1855		
Aug 4	“ Cushing “ “ “ drawings	96.50
“	“ Cranes “ “ “ patterns	41.47
	“ 95 lbs Castings @ 4c	3.80
	“ 473 “ “ “ 4½	21.28
	“ 456 “ “ “ 4	18.24
	15½ “ Chaw links @ 3/9	9.69
Sept 22	“ Cushings Bill for making drawings	17.50
	“ Labor, Wro't iron & steel (estimated)	<u>100.00</u>
		\$386.52

Memo of Materials & Labour on 11
Cottages made of the Old Counting House

Chandler Cass for laying 71 63/100 perch		
Cellar Wall	73	71.01
New Timber & Joist in 6 Cottages	13.74 ft.	
Boarding outside & Roof of Back Rooms	1,796 ft. (6c)	
Under Floor in B. Rooms	581 ft. (6c)	
Boarding 19 ft. Roof	7,660 “ “	
Under Floors	4,320 “ “	
G. Frye to 24 47/100 Perch Mortar Wall	at 9/ (6c)	36.70
47,749 Bricks for Chimneys etc	@ \$6	286.49
Gates Frye for laying 47,749 Bricks	@ 14/ pr. m.	111.41
14,477 ft. studing, furing, & cellar partitions	(6c)	
33,000 Laths	at (6c)	
Gates Frye for 1,856 ½ yds plastering at 8c pr yd (6c)		148.52
Gates Frye “ laying 12 8/10 perch mortar Wall sheds (“)		19.20

		Mrs. Davis			Cr.	
1845						
March	19	By washing 26 curtains for 5L. @ 3c				.78
"	28	" " 36 " " 4C. " "				1.08
"	31	" " 31 " " 4L. " "				.93
April	11	" " 49 " " 1L. " "				1.47
"	18	" " 25 " " 2W. " "				.75
"	19	" " 18 " " 2W. " "				<u>.54</u>
Settled May 2 nd 1845						\$ 5.55
1847						
		Mrs. Prike			Cr.	
		Amount Bro't forward 269 curtains				8.07
May	2	By washing 19 curtains for 1L. @ 3c				.57
"		" " 42 " " 2C. " "				1.26
"		" " <u>57</u> " " 2L. " "				<u>1.71</u>
		387	Settled May 1847			\$11.61
"	28	By washing 27 curtains for 1D. @ 3c				.81
Settled June 12, 1847						
1848						
March	22	By washing 61 curtains for 5L. at 3c				
"	31	" " 37 " " 4L. " 3"				
"		" " 54 " " 1L. " 3"				
April	15	" " 28 " " 1D. " 3"				
"		" " 24 " " 4L. " 3"				
		" " 28 " " 4W. " 3"				
	21	" " 36 " " 5W. " 3"				
	25	" " 38 " " 2L. " 3"				
		" " 42 " " 2C. " 3"				
		" " 20 " " 3L. " 3"				
		" " 42 " " 1C. " 3"				
		" " <u>34</u> " " 2W. " 3"				
		444	" 3"			
Settled April 27, 1848						\$13.32

		Mrs. Prike			Cr.	
1846						
April	1	By washing 41 curtains for 1C. @ 3c				1.23
"	4	" " 33 " " 4C. " 3"				.99
"	7	" " 32 " " 2L. " 3"				.96
"	9	" " 31 " " 4L. " 3"				.93
"	10	" " 45 " " 1L. " 3"				1.35
"	22	" " 38 " " 4L. " 3"				1.14
"	24	" " 43 " " 2L. " 3"				1.29
May	4	" " 28 " " 1D. " 3"				.84
"	"	" " 25 " " 1L. " 3"				.75
"	"	" " 42 " " 2C. " 3"				1.26
		" " 30 " " 3"				<u>.90</u>
		388	Settled May 9 th 1846			\$11.64
"	11	By washing 27 curtains for 5L. @ 3c				.81
June	1	" " 44 " " 5W. " 3"				1.32
"	3	" " 31 " " 4W. " 3"				.93
"	"	" " 36 " " 3C. " 3"				1.08
"	5	" " 18 " " 6R. " 3"				.54
		" " 38 " " 2L. " 3"				<u>1.14</u>
		194	Settled June 20, 1846			\$ 5.82
1847						
April	12	By washing 40 curtains for 4L. @ 3c				1.20
	13	" " 38 " " 4L. " "				1.14
	"	" " 25 " " 1L. " "				.75
	14	" " 42 " " 4W. " "				1.26
	15	" " 42 " " 1C. " "				1.26
	"	" " 29 " " 2L. " "				.87
	"	" " 21 " " 5L. " "				.68
May	1	" " 32 " " 2W. " "				<u>.96</u>
		269	Carried to opposite page			\$ 8.07

		Mrs. Davis			Cr.	
1842						
April	4	By washing 27 curtains for 5L. at	3c			.81
"	18	" " 37 " 5W. " 3c				1.11
"	22	" " 44 " 1L. " "				1.32
"	28	" " 31 " 1C. " "				.93
"	30	" " 18 " 1W. " "				.54
"	"	" " 9 " 4L. " "				.27
May	9	" " 34 " 2L. " "				1.02
	19	" " 21 " 3L. " "				.63
		" " 12 Short " "" " "				.36
June	1	" " 43 " 2W. @ 3c				1.29
"	18	" " 35 " 4 " " "				1.05
"	22	" " 40 " 4L. " "				1.20
"	24	" " 34 " 4D. " "				<u>1.02</u>
		385 Settled June 25, 1842				\$11.55
July	2	For washing 52 short curtains 3D at 3c				1.56
		" " 8 long " 3D " 3c				<u>.24</u>
		Paid July 18, 1842				1.80
Sept.	7	By washing 44 curtains (3W.) @ 3c				1.32
		Paid				
1843						
May	11	By washing 79 curtains for 5D. @ 3c				2.37
"	15	" " 24 " " 2C. " "				.72
"	17	" " 39 " " 4L. " "				1.17
"	19	" " 42 " " 1C. " "				1.26
"	22	" " 40 " " 4D. " "				1.20
"	24	" " 41 " " 3D. " "				1.23
"	26	" " 36 " " 1L. " "				<u>1.08</u>
		Carried forward				9.03

	Prike					Cr.
1843						
April 21	By washing 36 curtains for 4C. @ 3c					1.08
28	“ “ 26 “ “ 5L. “ “					.78
29	“ “ 44 “ “ 1W. “ “					1.32
26	“ “ 38 “ “ “ “					1.14
May 4	“ “ 44 “ “ 2L. “ “					<u>1.32</u>
					Paid May 19, 1843	5.64
May 29	Mrs. Davis					Cr.
					Amount bro't up	9.03
					By washing 36 curtains for 4L. @ 3c	<u>1.08</u>
					Settled June 15, 1843	10.11
June 1	Prike					Cr.
	By washing 44 curtains for 4W @ 3c					1.32
					Paid Aug. 15, 1843	
1845						
	Mrs. Prike					Cr.
April 26	By washing 40 curtains for 3C.					1.20
May 24	“ “ 12 “ “ 1L.					.36
“ “	“ “ 34 “ “ 4L.					1.02
					Settled July 23, 1845	2.58
Aug.	By washing 19 curtains for 2L.					.57
					Settled Sept. 12, 1845	

Memo of Eastern Lumber as Survey'd at the Merrimack Mills

When Survey'd	No. 1	No. 2	No. 3	No. 4	Thickness	Total Ft.
1844						
June 19		259	1,884	2,565	1 in.	4,708
" "		103	230	453	1 ¼	786
" "		325	273	301	1 3/8	899
" "		574	620	258	1 ½	1,452
" "		189	49		1 ¾	238
July 1		2,014	17,592	18,506	1 in.	38,112
		664	735	521	1 ¼	1,920
		1,912	1,144	519	1 3/8	3,575
		4,564	2,439	184	1 ½	7,187
		182	500	22	1 ¾	704
		392	774	1,826	2	2,992
		56	642	571	2 ¼	1,269
			87		2 ½	87
			2,574		6x3+3 ½	2,574
				370	6x7	370
		11,234	29,543	29,096		66,873

1841 Memo of Eastern Hard Wood Lumber Surveyed at Merrimack Mills

Oct. 20	2¾ Ash plank /13.2¾	Ash plank /1¾	A. plank /1¾	Birch Boards	
Posts	1,234	159	2,002	1,120	6,426
7 ft.	2,332	632	544	2,005	3,684
173	541	277			1,865
202	985				
9 ½ ft.	5,092	1,068	2,546	3,125	11,975
254					
413	1,068				12,731
	2,546				
10 ½					
139	3,125	12,955			
206	11,831	Total Planks			

		Mrs. Prike		Cr.
1844				
March	2	By washing 44 curtains for 5W. (new)		1.32
"	14	" " 20 " " 5L. @ 3c		.60
April	2	" " 36 " " 4C. " "		1.08
"	6	" " 21 " " 2L. " "		.63
"	9	" " 42 " " 2C. " "		1.26
"	17	" " 37 " " 2W. " "		1.11
"	18	" " 34 " " 4L. " "		1.02
"	19	" " 43 " " 1W. " "		1.29
"	20	" " 38 " " 1L. " "		1.14
"	23	" " 39 " " 4L. " "		1.17
"	24	" " 16 " " 1L. " "		.48
"	"	" " 36 " " 1C. " "		1.08
"	27	" " 42 " " 3C. " "		1.26
"	"	" " <u>42</u> " " 2L. " "		<u>1.26</u>
		490	Settled April 27, 1844	\$14.70
May	2	By washing 20 curtains for 3L. @ 3c		.60
"	7	" " 22 " " 2D. " 3"		.66
"	"	" " <u>4</u> " " 2W. Erson 3		<u>.12</u>
		46	Settled May 16, 1844	\$ 1.38

Memo of Lumber Surveyed for Print Works

1844			
Sept.	2	1,022 ft.	No. 2 Eastern
"	9	1,529 "	No. 3 "
"	"	2,894 "	Up River Merchantable
"	"	2,011 "	Eastern No. 3
"	11	2,903 "	3 x 5 Joist
"	16	1,180 "	Eastern No. 1
"	"	565 "	" " 2
"	18	1,235 "	Up River Merchantable
"	22	4,100 "	" " Good
"	23	3,035 "	Eastern No. 3
"	24	5,500 "	Laths
"	27	432 "	Hard pine boards.
"	"	667 "	Eastern (2 in Plank) No. 4
"	28	600 "	For Boxes
Oct.	2	4,700 "	Up river white pines.
"	"	1,490 "	" Hard " "
"	"	4,000 "	" " Hemlock
"	15	7,696 "	Box Boards Cr. to Print Works 7,196
"	19	612 "	Hard pine 1 ¼ in
"	"	1,046 "	2 in. planks
N.H.	27	1,679 "	Up River - N.H. ?
N.H.	27	865 "	" " Good
	28	6,649 "	From Box Boards
Nov.	2	716 "	3 x 5 Hard pine joists
"	2	3,663 "	No. 3 Eastern }For lumber
"	"	6,936 "	" 2 " }
"	"	24,168 "	" 3 " }shed & charged
		<u>6,398</u> "	" 2 "
		99,162	

Memos of Lumber Surveyed for Print Works

1844		
Nov. 4	1,362 ft.	3x5 joist
“ 5	582 “	White Pine Timber
“ 9	407 “	Hard pine joist
“	1 “	Rived Shingle extra No. 1
“ 10	12 “	Cedar Posts 10½ ft. long (22 sometimes)
“ 11	769 “	3x5 joist hard pine
	2,611 “	Eastern No. 2 }
	1,662 “	“ “ 3 }For lumber shed
“ 15	789 “	“ “ 2 - 2 in. planks
“ 16	1,015 “	3x5 hard pine joist – good
“ 17	979 “	Up River 2 in. planks good
“ 18	3,147 “	“ “ Boards
“ 19	841 “	3x4 joist Hard pine
“ 26	1,148 “	3x5 hard pine joist
“ 30	6,913 “	Up river & Eastern from Boxes – narrow
Dec. 2	3,470 “	“ “
“ 8	2,199 “	Eastern No. 2 thick stuff
“ 10	10,372 “	Up River Merchantable }
“ 13	2,609 “	“ “ “ } for shed
“ 21	2,084 “	3x4 hard pine joist
“ “	1,555 “	3x5 “ “ “
“ 23	6,943 “	Hard pine boards – A Good lot
“ 24	602 “	3x7 hard pine joist
“ 27	1,523 “	3x4 “ “ “ }
“ “	2,041 “	3x5 “ “ “ }For lumber shed
1842 Jan 10	2,050 “	3x5 “ “ “ }
March 9	3,146 “	Hard pine boards
“ “	398 “	2 in. refuse planks
“ 16	2,046 “	to P.W.& 2,528 for sheathing from boxes ? room

1841 Memos of Lumber Surveyed for Print Works

April 4	852 ft.	3x6 hard pine joist
	1,593 "	3x6 Hemlocks
May 27	1,664 "	2 in. Hemlock Planks
June 7	1,616 "	2 in. Hemlock Planks
June 24	2,356 "	2 in. Pine Planks
June 25	1,336 "	2 in. Pine Planks
" "	3,110 "	2 " Hemlock "
" "	2,214 "	2 " White pine "
" 28	1,818 "	2 " Hemlock "
" 29	2,308 "	2 " " "
" 30	4,736 "	Hard Pine Boards
July 30	2,714 "	White pine "
Aug. 1	1,102 "	" " "

Timber in a Loom, Board h.

7 + 7. 8. 8. 5. 21.19. 6. 3. 51. 7 = 144 Feet
Yarn Beam 40 = 184 ft

Recipe for making cement for card

Cylinders

1 lbs. shellac dissolved in 3 pints alcohol
mix in 6 lbs. whiting - ½ lbs. White lead ground
in oil and Japan

Memo of Lumber Surveyed for P. Works etc

1841					
May	12	4,670 ft.	Up River	good	Dld P. Works.
"	13	415 "	Eastern	No. 3	" "
"	"	606 "	"	No. 2	" "
"	26	8,585 "	Up river	Merchantable	" "
June	17	4,312 "	" "	"	" "
June	19	2,826 "	" "	Good	" "
"	"	900 "	" "	" 1¼ thick	" "
July	15	1,023 "	" "	Merchantable	" "
"	16	15,915 "	" "	" (free from sap)"	" "
"	"	1,858 "	Hemlock	Planks	" "
"	19	4,072 "	" "	"	" "
"	"	2,055 "	Eastern	No. 2	" "
"	20	1,136 "	Up River	Mer. (free from Sap)	" "
"	"	3,022 "	" "	Mer.	" "
"	22	4,050 "	Hemlock	boards	" "
"	23	520 "	Up River	7x4 for rafters	" "
"	26	1,155 "	Merchantable	Boards	" "
"	"	985 "	Up river	3x5 joist (free from sap)	" "
"	"	1,055 "	Hemlock	Boards	" "
"	27	1,362 "	Up River	3x5 joist (free from sap)	" "
"	"	1,076 "	Merchantable	Boards	" "
August	2	812 "	Up River	Hard pine Boards planed	" "
"	"	1,028 "	" "	2 in. Planks	" "
"	4	1,298 "	2 in. Planks	Eastern No. 4	" "
"	5	603 "	Up River	3x4 joist	" "
"	27	2,142 "	" "	Merchantable Boards	" "
"	31	408 "	" "	3 in. plank	" "

Memo continued 2 leaves back

342 lbs. Picker Waste Sent to the
Lowell Co. to be run through their New Cleaning
Machine