Nathaniel
Prentiss
Jr. 1780
Journal
Vol 4th

1 Jany 1780

I resolve to keep a
regular journal of my
transactions for the space
of one month at least —

Sat: 1 Jan^y

— Got my Appr^s carried
down to the Market —
cost me 4 Shill^s —
employed a Droll fellow
with a hand to transport
the apparatus — Journey
all safe — Got the Tour
room warmed — a warm
fire — Dined at the
Inn — 5 Shill — Spent
the evening in reading Elev^n

Sun: 12 Jan: 1780 —
Rose at 3 — Breakfasted
on Sea-coal made by
Mr Ryan — Dressed —
read Montesquieu Dictionary
Dined with Mr Evans on
boiled beef a turkey
and Plum-pudding —
went with Mr Evans to
the Patriot club —
This club consists of above
50 members of which
there are about 16 pre-
sent — the president is cho-
sen every night — They
drink Porter and Whis-
key punch — meet at
7 and break up at 9

conversation turned on a variety of subjects. Manners on Gentlemen asked seriously what became of the old moons. I replied they were made into stars — Exchange of Dublin was said to have cost already 65000 pounds that the whole would not be completed under 100,000 — More whiskey made in Drogheda than in any other town in Ireland. £20,000 was granted by Parliament for building the exchange the rest by a lottery by which they clear 3 or 4 thousand a year — Parliament is affirmed to be the best in the world — The fraudulent

after calling for the toast
gave a shake with a little
mallet on the table and re-
peated the toast — Jeans
linen — woollen — Silk — Cotton
Leather & Manufactures —
— my hemp hand him when
honour cannot — O now
he is a dealer in hemp —
— The bell was called for
at 9 the President for the
following evening was ~~about~~
named by the President
and drunk to as President
elect —

× O the dowt relieve him
× for time, take him while time
serves —
For time is no time when
time is past —

Monday 3 Jany 1780 —
— Got my coat spot into a
shade belonging to Mr.
Ewing Publican — Settled
up the instruments that
were taken down for practis-
ing at the inn — Spent
the evening at my lodgings
Tuesday 4 Jany. 1780 —
This morning at breakfast
agreed with Mr and Mrs.
Evans to ~~be~~ dine as well
as breakfast with them
terms not mentioned —
— we pay half a Guinea
a week for our lodgings
which consist of a large
well furnished parlour &
the chest with a small

bed room with two beds
in the cupboard we found
a catalogue of the china
glasses &c in the cupboard.
Dined with the family on
roast beef and warm mutton
the potatoes as usual served
in with their skins. The
Irish press this method
to the other for three reasons
they are cleaner and
keep longer warm —
a glass of excellent port
after dinner — Mr Evers
drinks a bottle and is the
first taker in town —
spent the morning at home
in preparing and adding
to my notes on Electricity
sent a ticket to the Mayor and
two ladies tickets to Mrs Shel-

Wednesday 5 Jan.ry 1780

— Gave my first lecture at one o'clock — present about thirty Ladies and Gentlemen — In the grand Jury room there is very seldom a fire — the weather also very damp. The machine weather than I had ever seen it — only four Guineas this day —

Dined with the Rev.d Doctor Irvine at a quarter past three — Company Mr.s and Doctor Irvine and my self — Mutton and cracked Salmon — They affirm the Bryn Salmon is better than any other but this I

met with in many place
about Port while we were
conversation — Thunder Mrs
L. much afraid of thunder
relate many strange peop
killed by lightning who the
mentioned escapes — A man
shaking a carpet was struck
dead — A family sitting round
a table with a lap dog
below the table — the dog
was killed and none of the
family hurt — Sir
Bailey while in bed the
room door was suddenly
forced open, he arose and
shut it, it was opened a
second time while he was
walking towards the door
to shut it again a flash

of lightning struck her
bed made a large hole in the
middle and set it fire — She
was so impressed with this
deliverance that she gave
thanks in all the principal
chapels in Drogheda
and the Neighbours have
this a true anecdote —
— Mr Lewis does not take
the Mercurial barometer
so well as ~~to~~ one of her
own as she says, now
of a strong glass bottle
filled with water and in-
verted into a basin of water
— She observed the Mercury
in the glass rise on
the 31st Dec. 1778 to lower
the Mercury at first more

than had ever been known
in this country — and what
was most remarkable was
that it was in an hour
above four miles before
the storm had abated any
thing — I observed that this
might probably be oc-
casioned by the Prince
being situated under a
rock — she acknowledged
it was — Poole Esq — a
good natured agreeable
pleasant Gentleman —

Thursday 6 Jan.y 1780 –

Changed the subject of my lecture to ~~[illegible]~~ the Nature of Heat but few attended – receive 16 for single lectures but to attended to Audience ~~[illegible]~~ ~~[illegible]~~ ~~[illegible]~~ Lecture – two students of Dublin college wishes to have the lectures on Astronomy in his particularly & privately in ten days, because they were to be examined on that – Dined at Prof. Mellon's ~~at home~~ spent the evening at home Prof. Sh. does not approve of my theory of heat, his objections of little weight.

Friday 7 Jan.y 1750

— Gave the first lecture on Astronomy — Students much pleased with this lecture — Dined with Mr. Van Rennsleigh — Sup'd with Mrs Van: and his eldest son at their Company Mr. Rogers of Pultneytown & Mr. Comes and his family — Mrs Van — a genteel pretty woman — Claret — Port & Hock wine — Sat' till eleven — Mr. Rogers now left us to play cards with Mrs Van — Mr. Comes — Van and I had a great deal of agreeable conversation on War — Poll: Gaming — Snow wind —

Mr Dome again with Mr.
Bagdon about the Siege
but says he has greatly
exaggerated my things —
that he has given description
of what he has frequently
not seen — He accompanied
Mr Dome from Malta to
Alexandria Egypt — Vienna
Paris — Lisle — Petersburgh.
Many places in Germany
which I cannot remember
He is a person has travelled
is character of a tutor
understands almost every
European language also
greek and latin —
Mr Van Montrose is buried
in the churchyard of
Dunfermline an inscription on
a marble stone without

my vowels they have commence
for them — I intend to take
a copy of it —
Asked Mr. Domes if he
had ever seen or bought
coffee of Jonson — he has
heard of them he replied but
not seen them —

Saturday 8th Jan.y 1780

This day no lecture on account of the Market Day — Spent an hour with one of the students in explaining some things in Athenæum — Dined at home — Spent the evening — Pitts — Market not remarkably strong. Grain is a well sale and the gates are kept up solely for the custom which is a half penny on every bag or sack carried either out or in — so that Every man who brings a bag of grain of any kind to the market must

carry a complete set to
the Mayor in the Market
who asks him for how
much it was sold, the
price is entered in a book
and a ticket is given to the
purchaser without which
he cannot get out of the Mar.
a medium is taken of all
the prices and by this the
price for each week are
regulated a printed copy
of which is sent to every
Baker & is town on Sun-
day morning which regu-
lates the whole week — a
copy of this paper —
spent a part of this morn
in the Market with the
two students on Astron.

Dined at home — As the
pipe has nothing to say
to my belly I eat heartily
of beef & hilled the family
come on hand fresh and
eggs — Evening in my
lodgings — This day a
hard frost —

Sunday 9 Jan. 1780

This morning the frost continues very keen — spent the morning at home — Dined with Doctor Livingston — Company a Mr. and Mrs. Conley with Miss Cleanly & Clowning young Girl of about 18 — Conversation — on Astronomy Philosophy &c — The Doctor would not receive the reason of the tide on the opposite meridian to the moon — I engaged to explain it satisfactorily to him — Mr. Livingston remarked that sometimes

objects appear more
clear and nearer than
at other times, this is always
a sign of rain — If the
moon appears very red
and very clear after the
change it is a sign of
rain. The old moon with
arms of the new are infal-
lible signs of bad weather
A Dispute between Mr Doctor
and Mr Chantey about
the temperature of salt
and fresh water — appeared
to me I gave my opinion
in favour of the Doctor
that salt water was colder
this alledged to be contrary
to some Phenomena —

Spent the evening at home

Monday 10 Jan.y 1780

Frost still continues —
Upon examining the
cables of the Electrical
machine found the leath-
er quite worn and frayed
with grease and dirt, got
a new leather on the cut-
ter and resumed the electri-
cal experiments — the
Machine very powerful
Repeated all the experi-
ments of the last lecture
with great success — com-
pany seemed pleased —
Met in the evening at
six o'clock for the expe-
riments in the Dark — All
succeeded well the Aurora was

being wound the worm and was well illuminated with the discharge although the experiment would not succeed on the floor before the company met — If the chain was fixed in the zig zag form on the floor ~~by~~ with nails it would probably succeed much better — Received a smart shock from the Aurora Boreali experiment —

The circular pieces on the spiral tube should be placed nearer to each other

× Query is the undulating power of wood affected by the density of the wood —

This evening Mr. Roche
the Apothecary brought Jonas
Speyer in order to shew
he had confuted Mr. Jones
Mr. Roche does not under-
stand Newton. He is igno
rant of the science and so
silly to a great degree —
After the lecture this even-
ing was ended to drink
a glass of wine with Mr.
Dan.l and Doctor Magennis
at the house of the former
Conversation — Philosophy
Chemistry — The old Sysy
he Doctor thinks, entirely
he cause of animal heat
not unreasonable — Al-
though the motion of fluids

in large respects does not
produce any sensible heat
yet we know not what
may be with the rare white
the blood a fluid very glo
bul of which is compose
of six others, moving thro
respects so amazingly swift.
S. J. N. upon hearing that
the blood was composed of
six particles or globules
said it must therefore
necessarily be red. The
Anecdote of Sir J. Jones
hear before not do know
the reason of Newton
opinion —

Tuesday 11 Jan.y 1750 —

First finished the Elect.
experiments. Machinery
very powerful — The wires
for the Gun powder exp.t
were shortened a little
this makes the exp.t in
all probability succeed
better and a little work
is requisite — Company
very much pleased with
this lecture lasted near
two hours — waited
a clock of cotton for the
Remedy house and the
representation of clouds
below each other — want
also a support for the
cast pitch bat. Electrometr.

and the Christopher is furnished with a new Spirit Lamp.
I propose to try whether the hot iron will carry off the Electricity of the weather bottle a cable — I am of opinion it will. —

Adjourned until Saturday next on account of the general elections. The Grand Jury meeting in the room where I believe I received a card for the Masonic feast on Monday —

In mentioning to dine with Doctor Magennis to morrow at Ball Grove — Spent the evening at home —

This day wrote George Mathews and Adam Nimmay Esqrs.

Wednesday 12 Jan.y 1820

Frost — Mr. Van Hemigt called at the Thorlet for me to take a walk — we set out a little before 12 and walked along the river towards the obelisk — I expressed my surprise that the walls on each side of the river did not correspond. Mr. Van: said the south end of the city was built long before the north in the most extraordinary. The wall was built in the reign of King John as appears from a grant of money in the following reign or soon after for finishing the wall in repair.

About a mile from the town where the wad comes near the river I observed two fishing or they are called. They are in the shape of a bonnet interwoven with willow wands like a basket, this is covered with a horse skin they are four or five feet diameter and a foot and a half or two feet deep, have a board across for a seat – The fisher paddles this forward with great velocity, by a little board with which he shoves the water before the current falls into the wake and by this means runs forward

In these they took a great
many excellent salmon
he now came in sight
of the Obelisk this is the
Battle of the Boyne
N. Bank. pointed out the
place where King William
crossed the Boyne and
where King James unwil-
ling the engagement. In-
stead of heading his army
and spirting them on
he ~~remained~~ stood in Donore
Church yard a mile to the
south side on a rising ground,
a spectator of the danger
of his army. Had James
behaved as a man who
had more at stake than a King-
dom, than the British Ob-
elisk, he most infallibly

have gained the day. The superiority in numbers advantageous ground with the position of his battery within a quarter of a mile of the ford gave him infinite advantage over the enemy. With the same principles of economy which were extremely well placed & and which commanded the ford he might have might have made vast havoc with among the troops as they marched down a narrow defile which they actually in the time of his fire instead of this British army marched down to the was almost immoveable, as the Boyne with little loss

and attacked James' army
on their own ground, they
were routed and made
a shameful retreat. James
fled the first and then de-
~~th~~ gracefully surrendered his
military character —
The obelisk is square
pyramid founded on a
rock on the brink of the
river at the bottom of
the glen above mentioned
its height is feet
the base very short. It
ends in a point but
not gradually. It is cased
regularly on which it is
about 2½ feet square when
it contracts suddenly into a

point. The obelisk was
built about fifty years
since by subscription It
cost 1500 pounds. The
rock upon which it stands
is separated by art from
the other rocks on the shore
so that it is in a manner
inaccessible — The inscription
are nothing remarkable.
They set forth that the obel.
was raised in memory of the
glorious victory over Jas.
on that place — on the first
of July 1690 with the Lord
Lieutenants name who
laid the first stone and the
date — About a quarter
of a mile below the obelisk
is placed the first lock of the
Canal which runs to Slane

but as I propose on Friday
next to pay a visit to Mr. Jebb
who is chief engineer to the
canal as also the contractor
and manager of the Mills
of Stone Shotts &c. for
the satisfaction of the committee
will then be opportunity
of conversing with Mr. Jebb
Mr. Vans &c. I ~~return~~ intend
and arrived at Balt-Grove
about 3 o'clock — Dined
at home. Large company
of ladies Mrs. Magennis
and the Lady, three daughters
with a young boy and two
girls to whom Doctor Ma-
gennis is tutor by the
decease of the Lord Chancellor
the boy is heir to Balt-Grove
which Doctor Magennis

for cent per for support of the three children until the boy is major. — There are also present an male of the children. None but those brothers can claim ~~to~~ succeed to the estate should the present heir die. —

No particular conversation during dinner —

After dinner conversation various — Male and female plants — Seed in the bud of two melons rubbed on each other shew the blossoms grows the one with impregnate the other the fruit which grow shrunk up have and but three which hang down have none — Apple —

Bath House is pleasantly
situated on the banks of
the Tagus on high ground
from which there is a fine
prospect of the town. The
Church the view from the
roof near the Barracks
is perfectable —

Passed Mrs Evers Portuguese
Regiments — Half a German

Thursday 13 Jan.y 1780

Frost — I went down alone to the Magnolia by Water, was met by Mr. Lenhomright who introduced me — Sat down to dinner at half past four — This Elegant Entertainment was invited of above forty Ladies & the company about the same number, under a much greater number considering of the corporation & the Sheriffs table — Ten waiters attended the Mayors table. Among many other rare & other Fare were two venison hams, hams & the pickled oysters & Jellies Syllabubs &c —

formed a line of eighteen
down the middle of the table
besides an assortment of fancy
cakes in the middle of her line in the
center of which stood an
elegant Chrystal Pyramid —
Bread consisted of little rolls
of which one was laid down
each cover, with a towel
behind the chair for Dignitaries
hands and mouths after
Dinner — Dessert oranges
Apples — Walnuts &c —
Claret and port —
Toasts — The King — The Queen
Prince of Wales and the royal
family — The Lord Lieut. and
prosperity to Ireland. The
corporation of Dublin
&c &c —

luckily Mr Jeb was at the
feast & was introduced to him
by Mr Van: before dinner
Mr Dennis he and I sat
on each side of Mr Van:
about the middle of the
table — Mr Jeb and I agreed
to meet to morrow about
ten at Mr Van: where we
propose to breakfast, after
which we set off together
on horseback along the
canal for Olane —
Sweet creys — Mr Lyons
a son about Paddy's size
trade — Another young
gentleman the Sartin
story — The Philosopher
story about a vacuum &c
to a time nearly he came

as Maggy Lauder — Conversation
about Q — A little chat
with Mr. Lyons and an
old Clergyman about
Electr.y and Newton's law
of Gravitation — Joins the
Church — ~~to~~ her improved Reading
Society —

Quarter Sessions
Business of the Grand Jury

Friday 14 Jan.y 1780

Fort — At half past ten joined Mr. Van: at breakfast with Mr. Jones — Mr. Jebb came about 1 o'clock — We proposed to set out twelve — In the interim Mr. Jones asked me to go and see Mr. Jennian's cotton factory — He exhibited carding & carding machine — & spinning jenny of 64 threads. He got in three or four hours (did not break a single thread) some other machines which I had not time to

examine property of two
persons paying them a second
visit — At twelve set
out with Mr Jebb — We
remarked a great number of
the canal boats on account
from their being no heat
road down the south side of the
river from the Point back
to Broughadder — Contrary
winds or a great push
often prevent the men from
getting up by oars
sometimes they effect it
The Rangers proposes to
make a path way for
the horse which draws
the boat all the way to
Broughadder by his means

they will never be disappointed — he recommends first that it is extremely well built wide at the top than the bottom by about two feet, the walls being slopped a foot on each — it is feet deep and when the gates hang feet wide. The shaft of the sluice is a rack & pinion like mill stones on the axis of which is occasionally fastened a wheel or handle by which it is raised with great ease. The pinnion is metal is cast iron box. This is the rack gear. There is a

Sluice on each gate —
The gates are opened and
shut by a long and weight
lever. A boy can alone
perform the whole — ~~But~~
I do not propose to take the
mechanical dimensions of the
work I shall be further desirous
leave of it — ~~Volume~~
Mr. Gibbs observed the necessity
of cement ~~Mortar~~ adjacent to the
Mouth of the canal — He spoke
earlier two. One the building
a lock house. The other
was to supply that part
of the river with more water
There is a small Island
between which and the
first lock a branch of the

from flower with their branch
and the canal commenced
He felt inspired to break
a wall across the head
of the Island and throw
the whole river down the
former channel — This was
to be an obvious improvement
— Now we came upon the
Obstacle he observed
that King William was not
wounded in the battle, but
on the day before while he was
reconnoitering the enemy
from the high ground above
the Obstacle — A French
Gunner observing him along
with several officers, fired
a cannon at them — The
ball grazed the King's shoulder

We rode along the canal
Mr Pitt pointed out in many
places instances the ob-
ons upon which the canal
had formerly been conducted
There was no proper pow-
er here — At this Mr
Pitt has had to remedy
by levelling in some places
and filling up in others
The canal commences
with the river in two prin-
cipal places. The one can-
not and both they need not
be helped, as there is always
plenty of water in the first part
of the river, and boats can
get in and out of the canal
at any time by means of

these books planned by Mr.
Jobb. The other commander
with the view might and
ought to have been pre-
vented — Mr Jobb is going
to ~~cut~~ carry the canal
along a piece of ground
on the south side the river
Nile — Darkness of the
canal is dug through a
solid rock at an amazing
expence ~~it looks~~ a part of
the rock is left like an
arch through which the
people pass on the other
side of gunpowder
was made use of in blowing
this rock. This might have
been almost wholly avoided
by carrying the canal man
the river for which there
was sufficient room. It is
reported that Mr. Omer the
first engineer on this
in order to make the expence
come near his estimate
which was low as much
as that of some other en-
gineers — he opened the
canal to have the gates
which took of fresh
the Difference of the level be
tween the upper and the
lower part of the canal
is 24 feet this is managed
by nine gates —

after we arrived at Stane
Mr Abbe proposed to ride about
a quarter of a mile further to
the ruins of the Castle, the seat
of Lord Cunninghame — It
belonged to Fleming earl of Wig-
ton on account of his being con-
cerned in the rebellion, he was a
Jacobite among I I was not
mistaken, the estate was
confiscated — Lord Cunningh-
ame now an old man lives in
France. Colt Burton is heir
to the estate, his Father
married Lord C. niece —
The house is magnificent but
not completed tho it is
pretty old — The Colt. proposes
to make considerable ad-
ditions to it — The Commons

Speaking we visited the Man-
ar some enchanting prospects
The Palace lies on one side
a Lake rocks on the other
~~some~~ in some place
springs above it
upon the shore at others re-
turning to the distance of forty
or fifty yards with the
view of leaving silent groves
in the middle all together
in spite of the season of the
year and a strong frost
appears most delightful
the verdure the trees
were in two of the finest
rooms neither large large
nor remarkably elegant
but marble chimneys
with some opulent carvings
on them on our return

though the conversation Mr Jobb
told me that the manner
in which he was about 15 years
old, and found it grew in one
year 6 feet. Now it's found
the common opinion that
oaks grow so slow — we
stopped at Mr Jobb's for a
few minutes, after which
went to Mr Jobb's house and
introduced to Mrs Jobb a
quiet & quiet woman —
in the parlour there we dined
then we went painting
— Constantinus with — two
views one up the river
down the town. Collectively
executed a piece of painting
by Mrs Jobb representing

well finished. The ole manufac in this place is admirably hit off — The shades are very delicate and natural — the view — after dinner Gain a visit to the mill — saw some parts of the machinery but forgot examining it more particularly to-morrow — returned, drank tea. The evening was spent on a variety of subjects. Read St. Jobb the conversation of the strongest flood gates — It strove that it is ~~[illegible]~~ no easy matter to ascertain the number of float boards for the water wheel — The at first put 18 floats to a

not finished. The old mani-
fact in this place is admi-
rably kept off — The shades are
very delicate and natural —
Mine — After Dinner Paid
a visit to the Mill — saw
some parts of the machinery
but proposed examining
it more particularly to-
morrow — returned, drank
tea. The women were employed
on a variety of subjects
shewed Mr. Jebb the con-
struction of the strongest
flood gates — He observed
that it is ~~not an~~ no easy
matter to ascertain the
number of float boards for
the water wheel — The at
first put 18 floats to a

wheel of 20 feet diameter, the
floatboards increased from 6
24 and found the wheel have
more power. When there
was but 18 the wheel had
a jolting motion every time
the board entered the water
it was with a kind of
shake — It is not certain
but increasing them to
28 or 30 would still be an
advantage — wheel under
this problem more dependent
on the back water — I think
it is probable to make float-
boards with hinges for in-
stance metal which are li-
able to be incommoded with
back water — this I have

not properly weighed —
The tire is head of 7 feet. The
tire should be taken upon
the wheel near the lowest
part — No more than two
pair of shoes can be
turned conveniently by
one spare wheel — It is
not easy to keep the wheel
perfectly level if it carries
a shoe on one side, it
will finish the one and
the other will be too slack —
It is better to connect with
the cog wheel ~~one~~ a small
wheel whose teeth take
into the cogs on one
side only & let with the
great wheel is even

upon the axis of this lock
that is another very expensive
which turns the third pair
of mill stones — If weir
does not cause the river over-
flow the country Mr. Jeb
made an experiment for this
purpose. After raising the
weir 3 feet he found that
the water in the canal rose
no higher — The weir which
he has thrown across the
river joins the second pier
of the bridge it is 150 feet
long 8 feet perpendicular
height and 22 feet broad
at the foundation. It
commodates a short ridge
which is so nearly level that
the water flowing over it is

are fast upon each other
another — the slope in the inside
is not great, but on the out-
side one may easily walk on
it when the river is low —
This river was built by a
Frame lake a stone wall —
It throws the river into a
basin 800 feet long and 64
wide and 8 feet deep, at the
upper end of this is a dry
dock for repairing the buildings
This dock is built of excellent
stone and has an iron chain
round the whole to prevent
accidents — The water flows
out at a grate whose bars
are near each other the grate
is so large as to allow 11 feet
of water to pass — Gure will

as much water happy there
fore ~~as have a this~~ as there
a chain of ~~the~~ 11 feet? — I think
not — but have not examined
this matter. — Spent the eve
ning on various subjects
Ships of war compared to
forts — Gunnery — necessity
of better education for officers —
Cannon which have been
spiked cannot easily be
cleared without boring the
touch hole — Advantage
of howitzers — Languages
were next introduced — French
Italian — Spanish — Latin
Greek — Long time spent
in acquiring a tolerable
knowledge ~~[illegible]~~ of languages —

English Language more
difficult to pronounce than
any other — more sounds of
the vowels — Jamieson, much
admired — supposed by Mr J
to be a Mr Hamilton who
was secretary to Lord Dalkeith
mentioned some reasons for his
opinion —

went to bed about 12.

Saturday 15 Jan. 1780

Thaw and rain — Throw
sleight — spent an hour
and a half in the Mill
returned to breakfast
set out for Broghuda with
Mr Jebb at half past ten
It now rained very mighty hard
and by the time we reached
half way we were wet to the
skin the wind blowing
strong in our face when
we came to the Obelisk
Mr Jebb thought proper
about as he was very
wet I bid him good bye
and arrived in Broghuda
at 12 after one of the
most agreeable expeditions
I have ever had —

There is the little wheel
below the spur wheel
There is the two mill
wheels driven by the spur
Mill stones revolve in a
minute — 100 times
Grain of the mill from — 10 —
Each of the six pairs of
Mill stones will grind
in an hour — 10 Bushels
Approaches for shifting the
sack is very good one
two of them in the mill
each lifts a bag to the
upper story about 45
feet in a minute time
of Descent of the chain in
a shaft — a chain surface
of a ~~st~~ cord saves in their
Mill 20 pounds a year
Each barrel of wheat goes

meal times up and down
from the lower to the upper
story —

Wheat and flour are sold
by the weight
A Barrel of wheat 2½ Cwt.
A Bar.l or bag of flour 2 Cwt.
One of these bags is easily car-
ried on a little truck. Take
into the scale weighed and
carried off again by one man
in a minute — A lever hung
from the ceiling of the room is made
to press upon the end of
the beam from which the scale
hangs into the weights is
put — the beam is pressed up
till the empty scale rests on
the floor — the lever is then
readily fixed by putting
the other end behind a hook

fixed in the wall — the bag is
put on the scale the beam drawn
and immediately weighed the beam
is then again free and the bag brought
with the scale to the ground
the hook is applied perpendicular
to the bag which stands near
the edge of the scale — by applying
the foot to the bottom of the hook
and one hand to the upper part
of the bag, it is immediately
laid on the hook and shaked
away all this can be per-
formed by one man in the
space of a minute —
The Mill is stamped by screw
screw working in a strong nut
at one end and a round head
on the other —
Rolling Mills with wooden
clothes of different sizes made
use of — the wire or cloth by tender

in the holding the stone fire
the rest which moves & then
the two upon the from fire
hogs handles & keep constantly
working the inside of the cylinder
and the flour through cavity
Farmer or Master for change
is a large fly like the common
farmer stand between two
doors in the fourth story
when the right hand man or left
hand to assist the farmer
the open or shut the door
the door or fire at any
opening by a bolt in the
upper front & bolt to be
into a mortise of the door in
a quadrant of iron plate
above —

There is a moat or burying
place in which is a cave
lately opened at New Grange
which Mr Jebb pursuade me
are wide along the canal
I intend to visit it, Mr J. told
me at the same time that
Mr Burton had written an
drawings of all the antiquities
in the Kingdom —
From Drogheda, Slane, and
other two places on the road
to Dublin is just 23 miles —

The day being extremely
bad had but few at the
Lecture which was the first
on mechanics — Engaged
to Dine to morrow with
Mr Jones 2 miles in the
country — I told the com-
pany that I was rich
what spirits I really was
not might in the reading
Book — A Gentleman replied
How could that be when
he found a sixpence in
the shelves — I told him
that was not a necessary
consequence — Dined
and spent the evening
at home —

Sunday 16 Jan.r 1780

Rain — Set out for Mr Jones on Mr Evans Mare — Dined with Mr Jones and Son Mr Petrie and Another young Gentlm. Conversation — Cheerfulness — A Mr. English member of Parliament has fought many duels & never honourably taken the advantage, has pretended to be wounded and when his antagonist came up to him, has fired a pistol in his face — Mr Jones observed that they quite yellow tinged eyes grew in time very black — Mr.

horse dung immediately
out of the stable answers
for meadow better than
when prepared in a dung pit
he alleges that almost
every kind of manure is
nearly the same when ex-
posed to the air — the side of
an old dyke or ditch —
got a medal for flax and
Mr Bebie was perfectly of
my opinion with regard
to water spouts — when sail-
ing from Monroe to Calcutta
he observed three water spouts
from a very large and
black cloud — a very vi-
olent wind as it were raised
the boat out of the water
into the surface of the sea

was quite smooth — Some
hours after the water spouted
a weight we moved — They
then drove mile a little
from town to water from Ba-
ton, in returning we met they
sent Mr a great number
of Indian men which gathe
red a great mob of country
people who otherwise they
would have damaged
at night they got to Major
and his Lady on a car
and he not have left on
foot to Baton —
At Noble the American
Officers are land at distance
and friendly to each other
— Love and friendship —
Long life and liberty —

Two Gentlemen Drowning
on the impossibility of salva-
ting the least profit in proto-
ucts as chairman. Finally
he on laid laid a wager
that whatever he should give
to a chairman they would
not be satisfied — he came
a couple of chairmen carry
him across the street for which
he gave them — half a Gun
Long life and God bless you
Noreen will you not give
us something to drink —
he replied that he was
If you give one of them
mutters any more than
their due they will beg
you for shillings —
It is now 12 o' clock I
go to bed —

Monday 17th June 1786 —

Rain — This day gave the second lecture on Rhetoric few attended — Dined with Doctor Shelton — Company Mr. and Mrs. Market an Attorney and the family — Amusing first a little dark eyed — from the Doctor — Mulberry — Strong dispute about light the Doctor insisting it is material and electrical — This it is rejected the Doctor's amendment because it can be intercepted — I alleged it might possibly be a celestial light seemed — Asked him why the eye did not feel with the fabric

to this no satisfactory answer
He (Coler) stated that it was
but fair that I should examine
both sides of the question & thanks
him for the remark as also
for another hint respecting
the western ignorance further
time on Astronomy —
Resumed the Lord Mr. Owler
Bentley's Elements —
Mr Owler thought it proper
perhaps to elucidate the air
by such a degree as he was
reminded and rain by sundry
experiments & which fortunately
to a Rest!! —
This day gave orders for
a new axle tree to my
cart as the old one could
not mend properly —

I spent the evening at home
conversation with Mrs. Ewen
and Miss Ryan about my-
self — fearful of my own feeling
this, I find from experience
I am too apt to introduce
after having been hearing
a company of friends, this
not in the least connected
with religion —

Wed. 18 Jan. 1780

Rain — Gave my lecture on Hydrostatics, the two lectures in one — On account of a sale of the effects of Mr. Hatchett who has failed, few gentlemen attended lecture — Hydrometer broken — At the room in evg. Proposed to print the file on certain terms — Dine at home — went to the school club in the evening, Mr. Evans president — 15 members present — Conversation — Started about the mechanical paradox — read —

Electricity — Stammer —
Mr Clapham stated that
the density of the matter put
into the mouth of the patient
would affect the shock, the
more dense the greater shock
this I maintained had no effect
on the shock, as the shock
resides in the glass not
in the water — He asked
me whether I had an Orang
and an Air pump — Circulation
in the blood — It was
affirmed that the pulse is to
be found in Ireland —
that the blood will be ob-
served both in the Arteries
and veins — in the former
going to the extremities and
in the latter returning —

The conversation then turned
upon the making of powder after
their return, when it struck off
was assumed that a goose had
both waked and quacked — that
a hare had run to his mother
without her head — A story
was then told of a fox which
was swallowed by a pike,
afterwards lifted out of the
water by a goat. When the
fox jumped out of the pikes
belly and was afforded af-
terwards an excellent hunt
A pastoral walk from
the President occasioned
an attack from Mr Fuller
a Presbyterian Clergyman who
it was alleged did not think
for himself. He was pelted

by several others of the same
species — see from 47 to 52
A new member was balloted
for — no black beans — He
was made president elect
for in the usual form of the
club — adjourning &c —

Wednesday — 19 Jan. 1780

Very rain — This day gave
the two lectures on Pneumat.
in one — Very few attended
I cannot say that I thought
rather low — Dined at home
with Prof. Evers last week
receiving half a Guinea —
Spent the evening at home
read Jones first principles
of Natural Philosophy
— some of his objections
to the Newtonian Phil.
very shrewd, characteristic
sophistical — but not most
of his afterwards —
Gris Dept. of the two lamps
pretty enough — Bladder —

Thursday 20 Jan. 1750

Hard frost — Gave my lecture on Magnetism — few attended — often in command by their speaking to one another during the lecture — two ladies came in about five minutes before the conclusion of the lecture — Dined & home went with Mr Evans to the club — conversation various Mr Fleming backsides think that a paper mill in Drogheda would turn to account — Stock of 1500 pounds would be sufficient he alledges to set the work a going — Different spots

were looked for to reach me
the Mill end — It will be a
long time before the Irish trade
flourish much in Ireland. One
alledged this was owing to the
dispositions and want of habits
of industry among the lower
class in Ireland — another
reason was given why the
English wool manufacturers
would under sell at the
Dublin market was ~~that~~
the poverty of Ireland and
the great capitals of the
English — A weaver who
has two looms and a
large family would take
at least twenty p.c. cost
to make ends meet —
On account of the taxes
of England &c. &c. &c. &c. do

when we returned from the
club found Mr Evan Roberts
Ryan and other two Gentlem-
playing Cards, a Game
they called the Lottery —
Two Kings, two Aces & Queens
& one laid together on the
table then on from each
pair is lifted and after they
are properly shuffled. They
are present round the
company to purchase
as many tickets as they
please, laying down a
half penny for each —
the money is divided into
different prizes, and the
other pack of cards which
are the same as the tickets
are laid down one off.

feathers of the Pebble some of
them upon the Neck of Pelicans
which are supposed to be
persons who have the like
cords at the throat are
blanks — After eating
some dutch beef went to
bed —

Friday 21st Jan. 1780

Wind fresh — This day gave the first lesson on optics — Second change ladies — The apparatus of the shutting in the glass succeeded very well also the bowl — Dine at home — In the evening wrote to Mr Bryson, before Mr Mackenzie came and Mr Thomson completely — Pay 3 Sh. for Rosine to Blane. —

Doctor Young has a well stafed an gem which has not been used yet some time he promised to send it down to get it in order

Saturday 22 Jan 1780

Frost — barometer falling — Thursday gave my second lecture on ethics — Received from Doctor Lettsom Martinmeet Pamphlet on venereal ulcers — Dined at home after dinner accompanied Mr Evans to the Sheriffs where saw old highland piper playing at one of the stands — A handsome buxom wife at the stand — The Sheriffs have go Guards and men to attend with baskets to carry home what is bought — The same

at in Dublin — I spent
the morning in Mr M'Evings
in a house back yard my coat
has been standing once I
came to town — A slath-
yard is here called a Haggard
One Murphy in the neighbo-
hood had his haggard set on
fire lately — In this coun-
try it is not safe for a
man who lives in the country
to be on a jury in a crimi-
nal case — If the unnatural
wretch of his country
seldom fail to revenge his
death on the most active of
the jury by burning houses
or haggards, houghing
cattle &c —

Mr M'Ewing mentioned the
advantage of the banks in
Scotland — If a man has a
hundred pounds by him he
sends it to a bank — and it
lies for eight days and re-
ceives £ 5 Cent interest for
it — Pavement stone — Cannot
on the termination of a walk
stalled with this kind of blue
stone and Common stone in
a neat little office — Sheyth
Bowling Green — Tide water
at Grangemouth and Port Glas
he alledged would always prop
and make more of a Grain
or meal ship — than a tobacco
ship — He peaks make a
bolt and He bolts a lion —

Read in Mr Ewings for 3 days
of Whisky & fines — report
that Paul Jones is taken —
and that Sir P. Parker has
taken a vessel & meets Thompson
with some men of war —
It is now near twelve o'clock
I go to bed —

+ Proofs of making Gun
powder —
+ Distillation of Whisky —
+ Baking
+ Assize of bread &c —
+ To go round the walls
+ of Drogheda —
+ Area within the walls —

Sunday 23 Jan 1780

Wet — this morning took a walk with Mr. Evans round the town walls — St. Mary's tower — St. Mary's church — Cromwell — was battered by cannon placed on a rising ground at the north side of the town walls about 15 to 20 feet high — a foot path on the inside supported on arches — there are some place in some place just enough demolished for the most part — the church remains in the town — Dined with Doctor Livingston company Mr. Palmer and the family — Doctor Lee

gave me leave come air-go
to get repaired in Dublin
This Gun has been borrow
of Mr Walker for two G.
it is made by Mr Bale
London — Mr Holmes
asked my if we come to
his door, to dinner a glass
with him — This Gentleman
is town clerk and Mayor
we sat very late — conversed
on a variety of subjects
I am asked to dine with
him to morrow —

Monday Jan. 24 1780

Frost — This day gave my Mind on Journey — Spent
rendered this Evening more
entertaining by several ad-
ditions I made to Mr Kent's Story
Dined with Mr Stevens
Company Mr and Mrs
Stevens Mr Dashwood and
other three Gentlemen —
Conversation — The free
trade — Interesting
History — Capt. Dutton
gave us a sketch of
Sherbrooke's man after —
temporary with Charles
the fifth — His dependency
upon the combined forces

Mr Robinson shewed me in
Pilot's Mirror an account
of the prosecution of Q Allen
There was a Cadet Bentley
who absented from his
sentence — This day received
two letters from Mr Tennant
and Mr Crombie — Tennants
letter is addressed to the care
of Mr Crombie and is dated
Nov. 25. Mr Crombie mentions
that an archard of peaches
for allowing it to lay by
so long — In this letter
Mr. informs me that
his old landlord James
Robertson now in Amherst
land was now hearing news
of his coming back to room

for him — That Mr John Cochran
finding that his Chiefs did not
agree with expressing such a
very liberal allowance as I
made for Printing his Sermon
his old Systematic conduct
dictated one this occasion —
That Doctor Cochran had
begun a course no Indian —
That Doctor Dair & Mr Gwen
Mr Stewart and Robinson
a high idea of my success
at Lisburn