**RI MS HD/13/C**

[Horizontal rule]

**RI MS HD/13/C, front cover**

13C

**RI MS HD/13/C, p. 000**

13c

[Ink sketch of eight-pointed star]

**RI MS HD/13/C, p. 001**

1

An unshaped mass of living sentiment  
My feelings were the feelings that the voice  
of nature gives to man. –

And in my peaceful bosom was  
the love of nature mingled  
with the love of man. –

And with no sophistry no damned

lies  
convert unto the purpose of his  
soul – The eternal thoughts of  
nature.

[Horizontal rule]  
To me no shaping intellect had given  
The everlasting laws which her sons  
The many days of pleasure yours  
As often in the shapings of his mind  
The renovated thoughts of former days  
Awoke the pleasant feelings, and He saw  
Bright & obscure as in the feverish dreams  
of future greatness all the mighty past  
The dweller in the stately palaces  
The son of regal pomp. And then He turned  
To his poor kindred. Smitten by the hand  
~~The iron hand~~ of <ancient> power the labourers of the nile

**RI MS HD/13/C, p. 002**

And in the breeze that swept the dry  
and parched desart  
Heard.

**RI MS HD/13/C, p. 003**

3

Romance on the establisment  
– of Religion –  
– Scene – China –  
Time before the deluge. –

[Horizontal rule]  
Achmet the son of Abdalla  
is born in the beautiful  
vally of Ur is taught philosophy  
by his Uncle Agnactae –  
He falls in love with  
Ugbec the daughter of  
one of the ~~a~~ anticreationists  
Illa who is attempting actuated  
by ambition to impose a  
new religion upon – the Urrites, –

their midnight conferences  
in the vally – Report of  
a visible deity beleived  
at first by Achmet. His  
fall down the [deletion][unclear]~~ch/~~[/unclear][/deletion] cataract

[Horizontal rule]

**RI MS HD/13/C, p. 004**

On breathing the  
Nitrous Oxide

**RI MS HD/13/C, p. 005**

5

Shall I renounce the countenance  
living in <the> beauty of expression  
shall I give up the articulately  
sounding voice whose gentle sound  
has so often lull’d me to  
repose to worship the dry  
& unmeaning word benevolence  
no let me live a son a  
brother & a lover, let  
me die a ~~father~~ a  
husband a friend &

a father.

On breathing the Nitrous Oxide  
Not in the ideal dreams of wild

desire  
Have I beheld a rapture wakening  
form  
My bosom burns with no unhallowed  
fire  
Yet is my cheek with rosy  
blushes warm.  
Yet are my eyes with sparkling  
lustre filled  
Yet is my ~~murmuring~~ mouth

implete with <~~murmuring~~> ~~dying~~ <murmuring> sound

**RI MS HD/13/C, p. 006**

Yet are my limbs with inward  
transports thrilld  
And clad with new born  
mightiness around –

**RI MS HD/13/C, p. 007**

7

The life of the Spinosist

~~The insensate dust is seen to t~~  
~~The dust insensate rises into life.~~ –

~~The liquid dew is lovely in the~~ ~~flower~~

~~The liquid dew becomes the rosy~~ ~~flower~~  
~~The o~~ The Spinosist  
Lo oër the earth the kindling  
spirits pour  
The ~~spark~~ <seeds> of life that ~~mighty~~ <bounteous>  
nature gives. –  
The liquid dew becomes the

rosy flower

The sordid dust awakes &

moves & lives. –

All, All is change, the renovated forms  
Of ancient things arise & live again.  
The light of suns the angry breath of storms  
The everlasting motions of the main  
Are but the engines of that powerful  
will. –  
The eternal link of thoughts, where firm  
resolves  
Have ever acted & are acting still. –  
Whilst age round age & world round  
world revolves. –

**RI MS HD/13/C, p. 008**

2 Linked to the whole the human mind  
displays  
1 No sameness & no <deep> identity ~~divine~~

4 & Changful as ~~is~~ the surface of the  
seas

3 Impressible as is the ~~blue~~ [deletion][unclear]xx[/unclear][/deletion] moving sky

~~To scattered thoughts some unknown laws~~  
~~are given~~  
~~By which they join & move in~~  
~~circling life. –~~

Being of aggregate the power of  
~~the~~ love.

Gives it ~~the life~~ <the> joy of moments  
, bids it rise –

In the wild forms of Mortal things

to move

Fixd to the earth below the

eternal skies. –

~~The~~ To breath <the> ether; & to feel the

forms

Of orbed beauty through its organs

thrill  
To press the limbs of life with

rapture warm  
And drink of transport from  
a living rill. –

**RI MS HD/13/C, p. 009**

9

To view the heavens with ~~solar~~ <morning>  
radiance ~~white~~ bright  
Majestic mingling with <the> ~~still~~  
~~blue sea~~ ocean blue. –

~~filled by the a thousand silver~~  
streams  
~~& played upon by ten thousand~~  
~~cloudless breezes~~  
To view the ~~meadows~~ <forests> green  
the mountains white  
The peopled plains of rich  
& varyied hue. –  
To feel the social flame to give  
Ten thousand signs of ~~kindling~~ <burning> energy,  
The nothingness of human words to scan.  
The nothingness of human ~~scenes~~ <things> to  
fly. –

To live in forests mingled with

~~the whole~~  
Of natures forms to ~~die~~ ~~beneat~~

~~upon~~ feel the breezes play  
Oer the parched ~~forehead~~ <brow>. to see  
the planets roll.

**RI MS HD/13/C, p. 010**

oer their grey head their life  
diffusing ray  
To die in agony & In many days  
To give to Nature all her  
stolen powers  
Etherial fire to feed the solar

rays  
Etherial dew to feed the  
earth in showers.

[Horizontal rule]

**RI MS HD/13/C, p. 011**

11

As the blue flower [deletion][unclear]~~xxxxx~~[/deletion][/unclear] neglected  
in the mountain beat by every  
breeze. yet it feels the sunshine.  
the mountain torrent. –  
~~When the wild tempest roars~~ &  
Though no delight beams in the eye  
Or vibrates in the ear  
When the wind roars & the agitated heaven  
Dark ~~with~~ <in> the thunder cloud mingles with earth  
Her children dews  
~~In big & trembling drops~~

[Horizontal rule]  
~~Though terror fills though no delight~~

~~The thrilling <fevered> bosom of humanity~~  
~~Though no delight beams in the~~ eye  
~~When the wind roars & the agitated hea~~ven  
~~Dark in the thunder cloud~~  
Yet is the heart warm with  
~~love~~ [deletion][unclear]~~xx~~[/unclear][/deletion] a hope

When the long parched earth  
Drinks in the ~~dews~~ <rain>, when the brown  
plant lifts up  
Its head unblossomed to the ~~lifeful~~  
~~air~~ moistened air

**RI MS HD/13/C, p. 012**

~~pregnant with li~~fe  
~~And turns its roots~~  
~~To the vivifying dews~~  
striken

pregnant with [deletion][unclear]xxxxxx[/unclear][/deletion] life  
A~~nd vivifying power~~ –

3  
Though on the blue & lowly flower.  
Nursed by the dews of spring  
Upon the wild & life deserted heath  
The blasts of ocean blow, the electric fires  
lights terrible  
Yet does it <sometimes> feel the ~~pleasant~~ ray  
Of clouded morning suns

And the ~~glad~~ <soft> palms of morning mountain  
Wafted by breezes warmthful as the light  
Of summer [deletion][unclear]~~xxxx~~//unclear][/deletion] days. –  
5  
Though on the peaches orbed form  
And sweet empurpled juice  
The vegetable despot armed in mail  
Hard & of many colors, feeds unawed  
Insatiate  
6  
Yet through the wound made by  
his tooth

**RI MS HD/13/C, p. 013**

13  
The seed of future life

[deletion][unclear]xxxx xxx xxxxx [insertion]xxxxxx xxxx[/insertion] xxxxxx xxxx[/unclear][/deletion]  
Of wondrous generations yet unborn  
Drops in the nurturing bosom of the  
earth  
Teaming with love.  
2  
Though the ~~wide~~ first chilling wintry  
blast  
Tears from their stately seat  
The beauteous blossoms of the lofty flower  
Last of ~~its~~ lovely race & nips its leaves  
~~And wounds it bar~~k.  
so beautiful  
3  
Yet does it leave a root that  
sleeps  
Awhile in solitude  
And darkness to arise more wonderful  
Kissed by the breath  
To shake its giant <buds> – ~~leaves~~ ~~amidst~~  
Of early spring. –

~~Though through the bosom oft the thrill~~  
Though through the <human> breast ~~of~~ ~~that~~ pang  
~~high being~~  
Of ~~burning~~ anguish <sometimes> thrills  
And though sometimes impressible   
to pain

**RI MS HD/13/C, p. 014**

Mortality ~~in dim~~ ~~&~~ ~~anxious~~ <verges in dimming> fears  
On ~~unexistence~~ unknown death.  
Yet after misery, ~~does~~ the joys  
~~Of come summers to the [unclear]xxxx[/unclear] soul~~Of fair existence rise  
More vivid in the mind, more wonderful  
Arise The unearthly <lovely> dreams of hope  
Implete with life…

[Horizontal rule]  
Wherever Matter dwells with power  
Or moving force indued  
~~There there is life & modifying~~  
There is the changeful <living influence> ~~aggregate of life~~  
perceived there in a ~~constant~~  
~~settled &~~ <settled &> eternal round.  
Alternate act. –  
pleasure & [deletion][unclear]xxxxxx[/unclear][/deletion] & hope & fear  
Mildly they form a whole.  
They modify each other & they give  
Birth to that the wondrous universe in which  
proud man unseen

Is but an acting atom  
Yet their mingled influence  
Is to him sweet & Joyous giving love  
Of <human> being. ~~Not mere~~ ~~dissonant~~

**RI MS HD/13/C, p. 015**

15

~~with the whole tenor of his varie~~d  
~~thoughts –~~  
~~is the wild action of the~~

~~fury pain~~  
The harsh agency. –   
Of awful pain. –  
Amidst the [unclear]xxxy[/unclear] remembered trains  
Of new & varying thoughts  
Lives as unfelt as that harsh   
mountain breeze. –  
blowing upon a wanderers  
cheek, whose eye –  
Feasts on the immensity of   
Natures works   
Where Nature is sublime  
& beautiful. –

[Horizontal rule]

**RI MS HD/13/C, p. 016**

Miriam  
But now the wind a sandy burden bears

[Pencil sketch of a face in profile]

[Ink sketch of a head in profile]

**RI MS HD/13/C, p. 017**

17

– Moses –  
Book I  
~~The~~

The sun had scattered from the midst of heaven  
Over the desart skirts his parching light  
Beneath the green plant now ~~the patient sh~~eep  
whose shading leaves  
Waved to the mountain breeze,  
the thirsty sheep  
loud & shrilling roused  
Reposed & watchful as the **~~watchful as the day flies sound~~**  
Approached of the brown dayfly, hid  
~~Was heard~~ ~~hid their warm nostrils~~  
~~beneath the~~  
~~soil~~  
their parched lips  
~~The mossy soil~~  
beneath the mossy soil. –  
– Book 1[superscript]st[/superscript] –  
Zipporah & the six other daughters of Jetho prest  
of Midian in watering their fathers flock are  
insulted by some Shepherds. Moses protects  
them & assists them in watering their  
flocks they take him to their fathers  
house – description of Pastoral scenery –  
Of the patriarchal manners Jethro a  
Man of Energy receives Moses with  
affection –  
2  
Moses relates His History of his

**RI MS HD/13/C, p. 018**

The poet had prepared & in the coach  
Fit for the journey laid two pondrous  
books  
Ycleped folios These contained indeed  
His darling poem that great  
history  
Of Alfred best of Kings from out  
whose loins  
Came George the third He who is  
married to  
Our good Queen Charlotte. This being  
done  
He spake unto his fellow  
Traveller & said. –  
Thou knowst the way. His  
fellow man replied  
I know the way. Then on the  
Poets face  
played a soft smile: soft  
as when leaves of trees  
look in a brook. & to  
the whistling wind that oer  
them sweeps  
Makes mildest melody. –

**RI MS HD/13/C, p. 019**

19

the great festival of the God of  
nature customs of the michanites  
Moonlight scene & reflections of  
Jethro on the system of the  
Universe –  
History of Moses. His earliest  
impressions connected with pharoah

Daughter: His Knowledge of his  
family. &c. –  
3 Growing love of Moses & Zipporah  
Moses agrees to stay with Jethro  
their happy pastoral life. –  
Moses in wandering in the desart  
falls down the cataract meets  
with Miraim, she tells him of  
a light of glory surrounding his  
body beleives himself under  
the immediate inspiration of  
the deity, His dreams. Theory  
of Jethro. – He resolves to  
return to Egypt. –  
4. ~~Opens with his speech to~~  
~~pharaoh~~

**RI MS HD/13/C, p. 020**

Meets Aaron sees his mother  
secret ~~confid~~ conference at  
the pyramids. Goes & speaks  
to Pharoah who was the  
companion of his youth  
Jacobinical sentiments Pharoah  
calls the magicians (reference  
to these in 2[superscript]d[/superscript]): visits  
Pharoahs daughter she supplicates  
him – the plagues –  
lamentation for the death  
of the first born –  
5. March through the  
desart ~~Moses~~ miraculous appearance  
of the son of God destruction  
of Pharoah & his army

Moses’s song

Amalek [unclear]xxxxx[/unclear]

6 Meeting of Jethro his  
counsels . .

**RI MS HD/13/C, p. 021**

21

institution of laws. Battle  
with the ~~horebites~~ communion  
with God on Mount  
Sinai. – end. –  
Mosaic acct of creation  
– Moses – A great but enthusiastic man  
– Zipporah – His superior in reasoning  
powers & in sensibility  
Pharoah A despot. –  
– Jethro – a Wonder a philosophic priest   
Joshua – A Hero. ie a murderer  
Hur –  
Miriam the prophetess the  
sister in law of Aaron –  
A wonderful woman. –  
– Amalek.  
miriam –  
Amalek conquered & Moses’s song

**RI MS HD/13/C, p. 022**

[Blank page]

**RI MS HD/13/C, p. 023**

23

Observations on Cornwal

**RI MS HD/13/C, p. 024**

She led the way the maiden light of foot

~~From the burning light of heaven sequestered~~  
They passed through palm groves

from the burning light  
Of Heaven sequestered where the morning

dews

Still spread their lustre oer the mossy

soil –

They passed through meadows

moistened <~~watered~~> ~~where a~~ <by a> [deletion]~~yellow~~[/deletion] stream

On whose ~~cool~~ <swift> waters cooled by

mountain snows.

The sultry breezes of the desart gained

[deletion]~~At~~[/deletion] a [deletion][unclear]~~xxx~~[/unclear][/deletion] <cheering> freshness. Dark within  
a grove  
Where the red flowrets of the aloe [deletion][unclear]~~xxxxx~~[/unclear][/deletion]

~~Their~~ [deletion] [unclear]~~xxxxx~~[/unclear][/deletion]  
This is my fathers cottage cried the  
maid  
Strangers are welcome here  
The old Man had retired in pleasant sleep  
His eyes were closed beside him  
on the couch lay a young  
Antelope.  
See our defender cried the sweet voiced  
maid

**RI MS HD/13/C, p. 025**

25  
The dark browd sons of Amalek had  
seized

The fountain of our fathers parched  
with thirst

The harmless children of the dewy  
earth  
No more had tasted of their  
mothers food  
Save for that strangers mighty  
voice & mightier arm appalled  
But [insertion] [unclear]xxx[/insertion][/unclear] often in the heavens my wondring  
eye  
Has seen the white cloud vanish into forms  
Of strange unearthly lineaments  
And often in the midnights  
peaceful calm have I been  
been wakened by strange unearthly  
Tones  
And often in the hour of  
sacrifice felt strange ideal  
presences. My son I see  
thy eye is turned most  
doubtingly upon my countenance  
In youth [deletion][unclear]~~x~~[/unclear][/deletion] the enthusiastic mind  
or sees in all realities a dim &

**RI MS HD/13/C, p. 026**

visionary world or hardly in the  
plenitude doubt sees nothing  
but what impresses his senses

[Horizontal rule]  
What are the splendid visions & the ~~thought~~

hopes  
Of future days but renovated thoughts  
And ancient feelings wakened into life  
By some new accident ~~and modified~~

and tinged with hues  
Bright in the glow of passion O

my Father.  
In vain the aspiring spirit strives to pierce  
The veil of nature dark in mytery  
In vain it strives proud in <the> moving

force.  
Of hopes & fears to gain almighty

power  
~~To form new worlds of intellual~~

~~agents~~  
To form created intellectual worlds  
Its inborn images have all the stamps

[deletion]~~marks~~[/deletion]  
Of outward things of sense. The priests

high

god  
~~The Demon of the Coward~~  
[deletion][unclear]~~We then~~[/unclear][/deletion] form.

**RI MS HD/13/C, p. 027**

27

The angel form that to the tearwet  
eye.  
Of some devotion smitten maid  
appears  
Are clad in all the attributes  
Of Man. –  
Distorted by the ~~wild~~ <changeful ~~chang~~ influence> & ~~erring~~ [deletion][unclear]pow[/unclear][/deletion]

[Horizontal rule]  
The Father of the thunder He who dwells  
In the blue heavens upon his throne  
Of light  
~~Of sunbeams –~~  
The demon of the Coward & the form  
[Horizontal rule]

Of passions dreaminess. –

[Horizontal rule]

Thy Voice is energy ~~my son. Thy words~~  
~~Are the high tones of confidence. In~~

~~youth~~  
~~The mind vivid in sentiment in dreams~~

~~ideal~~  
Thy words are the high tones of  
confidence. –  
The [unclear]safe[/unclear]

**RI MS HD/13/C, p. 028**

Such was the nature of her mind that  
whilst she tore up the scabious the thistle  
& the groundsel, the ivy she spared  
the violet & the daisy. She was  
sometimes scolded for not weeding  
clean; but her smile the present of  
the nosegay of weeds in which the  
selected the sweetest of the wild  
inhabitants of the fields soon made  
her peace. She was respected &  
loved. –  
Her visits to Aunt Margery now  
became more frequent. She read with  
the old woman. She read with  
Aunt Margery the history of Isaac  
Jenkins & the story of simple  
Susan & hymns for children  
& some of books of the cheap  
repository

[Horizontal rule]  
Our opinions are much oftener formed  
by our feelings & modified by them  
than our feelings by our opinions  
arguments in general an instance  
of this passion or uneasy feeling  
produces assents or dissents of different  
Kinds –  
no sneering –

**RI MS HD/13/C, p. 029**

29

Marrish in health had born his misfortunes  
with fortitude; but pain had unnerved  
his mind & his last hopes sunk  
beneath the accumulated weight of  
disease & misery. –  
His cough increased the pain in  
his chest became more acute, He  
was either chilled or burnt by  
the paroxysms of an acute disease.  
The successions of hopes & fears which  
occupy common minds in the last stage  
of consumption had no place in his.  
His character <was> blasted his life <was> forfeited  
to the laws there was no hope  
on earth. The world presented no  
resting place on which his wearied  
spirit might repose. – The ideas of  
his wife & child sometimes for  
a few moments occupied his  
mind & the golden dreams of  
former days awoke more acute  
misery more intense recollections  
of the present moment. –

**RI MS HD/13/C, p. 030**

~~M[superscript]r[/superscript] D had visited early in~~ the  
~~morning~~ Her fever had ~~increased~~ diminished  
during the night [deletion][unclear]~~x~~[/unclear][/deletion] a species  
of delirium which indicated a  
pleasurable state of mind a  
reaction of the soul succeeded  
to it. Her eyes were closed  
her cheek was pale her  
murmuring lips were constantly  
articulating with smiles  
M[superscript]r[/superscript] D. cautiously entered the room  
one of her hands hung carelessly  
out of the bed. in softly  
grasping it feel the  
pulse Susan awoke. –

She first fixed her eyes on  
the sun which shone through  
a white cloud full into the  
window of her appartment.  
She then turned them animated  
with a celestial fire on

**RI MS HD/13/C, p. 031**

31  
M[superscript]r[/superscript] D., We are in heaven  
she cried, Eternally blessed  
spirit, we are soaring  
thro the feilds of celestial  
glory. the darkness of the  
grave the pains of  
death we shall remember  
no more. –  
Quere? does not the blood in  
circulating through the brain &  
nerves supply (the ultimate atoms  
to the mind which constitute  
ideas –

[Horizontal rule]

**RI MS HD/13/C, p. 032**

1. Invocation (description & definition of   
Genius / its origin / description of the

infant organised so as to be   
capable of genius how its sensibilities

must be nourished so as to   
produce sublime emotion. –

**RI MS HD/13/C, p. 033**

33  
~~This~~ ~~whilst above the~~

This seated on the mountains hoary

brow  
The Traveller views the glorious scenes

below.

Where in the west the tints of evening

die

And the last ~~purple~~ <sunbeam> trembles in the sky  
~~Towards the s~~  
Thro circling Hills its lucid current

ran  
A friend to Nature & a freind  
to man. –

[Horizontal rule]  
Yours is the harp of ages & the

voice  
That sounds through time the voice

to nature

dear  
That rises from the harmony of  
thought & sentiment & life.  
To you I sing. –

More gently as O ye whose  
lofty hands embody life in nature  
Ye who feel In the green

wood the meadow & the stream  
The secret ties of love & Harmony

**RI MS HD/13/C, p. 034**

Making Man one with Nature

[Horizontal rule]  
To him has Genesis given the <awful> power  
of ~~Harmony~~ <sacred>. To whom the woods & streams  
And the white mountains & the azure

sky  
Are full of life & harmony. To him  
Whose eye is wet with tears of joy  
When nature beams with joy & happiness  
Whose smiles responsive the smiles of man  
Are every where the harbingers of Love  
And consolation. –

[Horizontal rule]  
The autumn seemed to  
mingle with the spring so mild  
is the weather. –

**RI MS HD/13/C, p. 035**

35

Peter Murray from June to Nov[superscript]r[/superscript]  
went [deletion][unclear]~~xxx~~[/unclear][/deletion] upon the [unclear]rein[/unclear] He was  
sometimes absent from his house  
for [deletion][unclear]~~xxx~~[/unclear][/deletion] two or three days together.  
During his absence Mary often

had those anxieties so common  
to children s~~he had heard enough~~  
~~the~~ & which are generally produced  
by the recollection of pains  
experienced during the ~~abse~~nce  
of [deletion][unclear]~~xxx~~[/deletion][/unclear] friends. The uneasiness  
of her mother & often her  
peevishness at those times  
increased her disagreable  
feelings. She often ascended the  
the hill to look out for her  
fathers boat. sometimes her  
straining eyes aided by her vivid  
imagination would recognise ~~his~~  
it in the grey clouds. What  
joy did she feel in the  
morning when she saw it  
entering the cave & what  
greater joy when she saw it  
laden with fish

**RI MS HD/13/C, p. 036**

She ran along the side of  
brook to the bottom of  
the hill she stretched out  
her little hands & sent

the silver sounds of her voice

over the wave to meet  
him –  
They lived in peace Mary  
had attained her tenth year.  
Her mind vigorously impressed  
by every surrounding object  
had attained the habit of  
reacting upon its ideas. She  
had learnt from language  
of changes in futurity & her  
romantic ideas of eternal  
peace & eternal parental love  
were the renovated thoughts  
of her infancy. Sometimes indeed  
she felt that expansion of  
life that thirsting after  
unknown things which is the  
true mark of a mind

**RI MS HD/13/C, p. 037**

37

filled with sensibilities, sometimes  
she thought of death of  
the old age of her mother  
& the death of her father  
& was miserable. –  
Her acquaintance was at  
this time enlarged by the

addition of a family of

Farmers who came to settle  
in the hill, the magnesian  
soil of the lizard covered with  
fine grass & capable of  
feeding sheep [deletion][unclear]~~off~~[/deletion][/unclear] had long  
offered a prospect – of success  
to the needy cultivators of  
the surrounding country but  
Edward Murray was the  
first of those cultivators  
who had been able to

[Horizontal rule]  
We are accustomed to consider thought  
& language as almost synonymous  
What an immensity of feelings what  
an innumerable [deletion]~~crowd~~[/deletion] quantity of perceptions

**RI MS HD/13/C, p. 038**

must necessarily impress the mind   
of all men. Writing & speaking   
are arts like music & painting   
to express some of them only. –

**RI MS HD/13/C, p. 039**

39

~~Many days of sunshine & of clouds h~~ave  
~~passed away since I last saw~~  
~~you at Marazion on my~~  
~~road to London~~.  
A long time is elapsed since I last  
saw you on my road to London  
I have not written to you &  
I have not given you any  
visible signs of remembrance  
yet believe me the recollection  
of you & feelings connected  
with that recollection have  
almost daily occupied no

small part of my mind. –

thoughts.  
Whilst new impressions connected  
with new scenes in life & with  
new relations to the world are  
are crowding in upon me I  
seem still to retain all  
my early ideas as vividly  
as ever, I shall never forget  
our sympathies & our conversation

**RI MS HD/13/C, p. 040**

at penzance when we needed  
sympathy & love to enable  
us to bear the oppression  
of peevishness & folly. –

We can trace back our existence  
almost to a point former  
time presents us with trains  
of thoughts gradually diminishing  
to nothing; but our ideas  
of futurity are perpetually  
expanding our desires & our  
hopes even when modified  
by fears seem to grasp  
at immensity. –  
This alone would be sufficient  
to prove the progressiveness  
of our nature & that this  
little earth is but the point  
from which we start towards  
a perfection that is bounded  
only by infinity. –

**RI MS HD/13/C, p. 041**

41  
How different are the roads  
by which we arrive towards

~~are going towards~~  
it. [unclear]xxxx[/unclear] in the bosom of

progress is marked amidst

domestic peace living amidst

the objects that have been  
familiar to you from  
infancy – ~~I separated from~~  
mine is in the more glorious  
my family connect with  
the world at large  
& a small agent in  
the improvement of mankind

– I do not always look back  
upon the interval that has

elapsed since I left home

without shuddering at the  
dangers to which I have  
been exposed. I was of  
that age when the passions  
are most powerful when

ambition & folly uncontrouled  
by experience are the masters  
of the soul –  
Temptations speak every where

**RI MS HD/13/C, p. 042**

to men in great cities which  
are the abodes of vice  
& of indolence – An active  
mind a deep ideal feeling  
of good, in look towards  
future greatness has preserved  
I am thankful to the  
spirit who is every where  
that I have passed the  
most dangerous season of  
my life with but few  
errors in pursuits which  
promise to me at some  
future time the honorable  
[unclear]meed[/unclear] of the applause  
of enlightened men –

I have been fortunate with  
regard to my friends

**RI MS HD/13/C, p. 043**

43

M M. has infor  
of the reason of my not writing  
you. it has been only the  
fear of troubling you My letters  
would not be interesting to you  
for they would only express one  
feeling which I should find  
it difficult to diffuse through  
many words, namely that I  
can never look to my present  
state without feeling the strongest  
emotions of gratitude towards  
my first protector & earliest  
friend. –  
If you do no write to me  
before the fifteenth   
month you

to

**RI MS HD/13/C, p. 044**

Profes

Blessed is he around  
~~Who is the infant marked for pleasu~~re  
Who is the infant formed for pleasure  
For Genius & her hallowed treasure  
~~He whose spirit early prove~~s

**RI MS HD/13/C, p. 045**

45  
1799. –

Blessed is the He around whose brows  
The sacred [deletion][unclear]~~xxxxxx~~[/unclear][/deletion] <light> of genius glows  
~~Early shall his Spirit pr~~ove  
~~The [unclear]xxxxxxxxx[/unclear~~] ~~flame of sacred love~~  
Early shall his ~~dusky~~ eye <Kindling eye>  
Turn towards the azure sky  
~~Feel~~ing the lucid star of day  
~~Proudd~~ ~~Winnin~~] ~~its~~

Proud rolling through its cloud clad way.  
Early shall his red lips seek  
His [unclear]~~xxxxxx~~[/unclear] Mothers love flushed cheek  
Or to the vale of pleasure turn  
And on her orbed beauties burn  
To him the earth the sky the air  
Shall teem with life & beauty fair  
And He in every form shall see  
The lineaments of sympathy  
The lightning fires the storms

that move  
Through the vaulted heaven above  
The meteors deep & awful light  
Shall but please his ~~wondring~~  
tranquil sight  
And the deep loud ~~growling~~ <wonder>

thunder  
Shall but wake his sleeping  
wonder.”

**RI MS HD/13/C, p. 046**

~~He shall~~ ~~hear the nois~~y drum  
~~And love to beat it w~~ith  
hi~~s thumb~~

**RI MS HD/13/C, p. 047**

47  
from the lord of the manor  
the grant of a [deletion][unclear]~~xx~~[/unclear][/deletion] settlement  
there –  
He was a robust farmer  
past the prime of his life  
Rude in his manners. He had  
that hospitality which is the  
result of ~~plenty & of peace.~~ <confidence in man>  
which never exists in those  
countries where ~~men are~~  
~~hypocritical grossly self interested~~  
deceit hypocrisy or gross self

interest exist. –  
He had several sons & a daughter  
all of which except (one) ~~Henry~~  
were much older than Mary  
Henry was two years younger –  
He was a fine healthy boy

**RI MS HD/13/C, p. 048**

so wonderfully constituted is  
the organisation of man  
that pain is uniformly  
connected either with breaks  
in the associations of  
our motions or with  
the production of energy  
by being modified by  
pleasure or with the  
separation ~~from~~ of  
voluntary ~~actions~~ from  
our general aggregate.  
Even the pain of disease  
cannot be lost it must  
attach itself to some  
parts of our nature &  
the association of analogy  
will direct it where  
to attach itself

**RI MS HD/13/C, p. 049**

49

If the marble columns  
the works of man if  
his [deletion]~~visi~~[/deletion] agencies cannot  
be annihilated – but only

undergoe gradual change.  
Shall the creation of

love be destroyed shall

the ~~invisible~~ links which  
bind the poet philosopher  
to myriads of Kindred  
spirits be annihilated  
by an affection of  
his organs –

No his

**RI MS HD/13/C, p. 050**

The human mind has  
lately been active & powerful  
but there is very little  
reason for believing that  
it has attained its adult  
state; for we view in its  
exertions not only the power

[deletion][unclear]~~xxxxx~~[/unclear][/deletion] they have acted

upon me during ~~the~~ ~~last~~ almost

the whole of the time that I

have been here.

Inactivity with regard to  
one thing has extended to  
another.  
And I have been so indolent  
as even to neglect the correspondence  
of my friends.  
& activity; but likewise  
the awkwardness of youth  
its poets artists philosophers &  
gentlemen. –  
that the period of its greatest strength  
is passed. or even that it has attained

**RI MS HD/13/C, p. 051**

51

by imagination in the future.  
Believe me my friend I  
have often had [deletion][unclear]~~xxxx~~[/unclear][/deletion] ideas full  
of life & hope connected with  
you. – The human mind has  
been active & powerful  
~~If we~~ may venture to  
reason upon abstract principles  
the human mind has not  
even yet attained its adult  
state; It has been gradually  
gaining new powers & faculties  
but it is as yet incapable  
of using [deletion][unclear]~~xx~~[/unclear][/deletion] so as to produce  
the greatest possible effect;  
its parts are not firmly  
united together; & they seldom  
act in perfect unity; many  
of its exertions are wholly  
thrown away. In short it

**RI MS HD/13/C, p. 052**

possesses ~~the strength~~ awkwardness  
as well as the strength  
& activity of youth: –

[Horizontal rule]

If it were necessary to  
appeal to simple facts in  
order to prove the truth  
of these assertions, we should  
find sufficient evidences in  
the want of <that> support which  
the different orders of  
society ought to give to each  
other. They are insulated in  
small circles of self interest; &  
they do not understand the  
intimate ~~relation~~ <connection> of their  
own welfare with the welfare  
of society. – ~~In this picture~~

~~no individual~~

The philosopher who makes  
in this picture many individuals  
many collections of individuals must

**RI MS HD/13/C, p. 053**

53

a discovery intimately connected

with a diminution of

seldom developes it with that

labor can only with the  
spirit of candor & openeness which  
greatest difficulty prevail  
upon the manufacturer to  
adopt it – & He is seldom able  
in consequence of [deletion][unclear]xxxxxxxx[/unclear][/deletion]

circumstances to unfold

it openly  
& in the spirit  
of liberality  
And the Manufacturer in  
general too near to a  
Mechanical being is unwilling  
to apply principles to his <to the> world  
art & considers it as rather  
dependent upon the body  
than the mind; <He is> suspicious  
of improvements as tending  
to diminish his importance  
in society; & incapable of  
estimating the advantages of  
theory He affects to  
despise it. –  
be excepted but it is applicable  
it to the [deletion][unclear]xxxxxxxx[/unclear][/deletion] greatest portion of the body

**RI MS HD/13/C, p. 054**

That which does not extend to sensible distances ie

‘attraction’ such as is found to obtain in  
the minute particles whereof bodies are  
composed which attract each other at or near  
the point of contact with a force much superior  
to that of gravity; but which at any distance  
from it decreases much further than the  
power of gravity. This power a late ingenious  
Author chooses to call the attraction of cohesion  
as being that whereby the atoms or invisible  
[unclear]~~xxxxx~~[/unclear] particles – Encyclopedia. Britannica Vo2  
Attraction. page 670 –

[Horizontal rule]  
Chemistry is a science the object of which

is to ascertain the ingredients that enter

into the composition of bodies; to examine

the nature of these ingredients, the manner

in which they combine & the properties resulting

from their combination. –

– All our classifications are in fact artificial

nature does not know them & in fact

will not submit to them. but it is

of use to form analogies as by means

of them the science is much readier

learnt. –

[Horizontal rule]  
Gravity is the attraction between bodies so

distant that the masses alone influence

the result & that the power may be

considered as residing in the centre of the

attracting bodies –

Adhesion supposes a distance too small

for our senses. It has been demonstrated

to depend upon the No of touching

points which depends upon the figure

of the particles that form the body

**RI MS HD/13/C, p. 055**

55  
cohesion takes place only between particles of  
the same nature. These instead of touching  
in one superficies only as in adhesion  
touch in every point where their figure  
will allow of contact: consequently the  
force of cohesion also must depend upon  
the figure of the particles. –

Affinity unites bodies of a different  
nature not merely by one superficies  
as cohesion does but particle

[Horizontal rule]  
Quere how far must the old established  
law of chemistry be admitted. that no two  
bodies can act on each other except one  
of them be fluid. –

[Horizontal rule]  
Since all the details in the preceding  
which have proved that the force of attraction  
by which compounds are formed is placed  
in every body & exists in it in  
a determinate degree it is evident that  
the phaenomena – ~~produced~~ <occasioned> by this force  
ought to take place in all the changes  
that are produced in the world  
& which constitute in their connection  
the harmony of the universe. –  
As these phaenomena are of two  
classes according to the masses <of the bodies> by  
which they are produced ie the phaenomena  
taking place between the great bodies

**RI MS HD/13/C, p. 056**

composing the universe & between the  
molecules of each body –

These only must be regarded as  
chemical & it only belongs to  
Chemistry the explanation of the  
Theory of them. –  
page [unclear]87[/unclear]. Vo1  
Berthollet has supposed in his essay

on affinity that the anomaly

depends upon – Mass –

[Horizontal rule]

– In the rich & privil~~d~~ledged  
orders <who are ultimately> the guardians of  
refinement, ~~&~~ of civilization  
& even of science: dissipation  
& the seeking after unnecessary  
wants has too much  
occupied the mind. The

most powerful & most

respected part of the  
human species have squandered

**RI MS HD/13/C, p. 057**

57  
away much of their  
strength in luxury &  
the vanity of pleasure;  
What might we not  
hope for in a state  
society in which the  
character of the philosopher  
was united to that of  
the artist & ~~it~~ in  
which it became the  
business of men & property  
& power eminently to  
patronise the sciences. –  
. – . The division & property

the division of labor the  
inequality of rank & conditions  
are in fact the germs  
of power in ~~the human~~

**RI MS HD/13/C, p. 058**

~~mind~~ <civilized society> its moving causes  
yea even its very spirit  
& life. – And looking  
forward to improvements  
We can only hope that

that the arts & sciences may be links of [unclear]xxxxxx[/unclear]

they may act with greater

force; so as to produce [unclear]xxxx xxxxx[/unclear]

their full & perfect

effects. – In this hope

we do not amuse ourself

with visionary theories; with

thoughts concerning the  
infinite perfectibility of  
the human species, ~~&~~  
the annihilation of disease  
labor and even death. –  
We look to a time which

**RI MS HD/13/C, p. 059**

59  
we may reasonably expect  
to a bright day of  
which we already perceive  
the dawn. –  
[Horizontal rule]

That the human mind  
may be able to exert its  
greatest force it is necessary  
that the different orders  
of Men that ~~support~~ <compose it>  
it should yeild to each  
other <firm> support & exert themselves  
with analogous ~~feeling~~, strength  
& principles. –

[Horizontal rule]  
Hitherto the different  
orders of society have been  
to much insulated in small  
circles of self interest & have  
contributed but little to the  
support of each other. –

**RI MS HD/13/C, p. 060**

The philosopher who has  
made a discovery connected  
with a diminution of labor  
has seldom had an opportunity  
or even an inclination  
to turn it immediately  
to the public good.  
– but we may hope  
that a new spirit has  
arisen that a new feeling  
has pervaded the public  
mind; it now seems to  
be generally felt that  
great & powerful exertions  
in the sciences & the arts  
can only be produced by  
a spirit that may

**RI MS HD/13/C, p. 061**

61

be called national & which  
connects together all the  
different classes of men  
in the pursuit of  
one great object. The  
prosperity of Britain; Her  
<proud> independance & her conquering  
energy; are dependant  
upon her arts & commerce;  
How much then ought  
we to wish for the  
perfection of their theories;  
~~& as~~ we are advanced  
farther in the <perfection of [unclear]xxxxxxx[/unclear]> ~~theory~~ of  
the arts than other nations  
& we can only preserve  
our superiority. by the improving

**RI MS HD/13/C, p. 062**

them by the sciences. –  
The truth of these assertions  
must be felt by all who  
have studied the British national  
spirit. By all who are acquainted  
with the increasing perfection  
of our arts & the extension of  
our commerce; which are ultimately  
connected with the political relations;  
the proud independence &  
the conquering energy of this  
people. It may be shown  
by an appeal to individual  
instances; & ~~in~~ this case  
I am proud to be able  
to ~~appeal~~ <scientific> ~~to the~~ institutions  
of this country. the societies;   
~~in which I have now the~~honour of addressing you;

**RI MS HD/13/C, p. 063**

63

In consequence of the happy  
effects of the multiplication  
of books of the facility of  
attending public lectures &

other causes a taste for  
science is becoming more  
generally diffused

[Horizontal rule]  
And we look to the  
future state of society as  
slowly growing out of  
the present state.

[Horizontal rule]  
More especially in this  
nation a general Spirit  
for improvement seems to  
prevail. It is demonstrated  
by the ~~increasing energy~~ <increase of perfection>  
in its its arts, [deletion][unclear]~~x~~[/unclear][/deletion] by the  
extension of its commerce

**RI MS HD/13/C, p. 064**

[deletion][unclear]~~x~~[/unclear][/deletion] by its proud independence  
& conquering energy. –  
[Horizontal rule]

From a union of sentiment

& of grand views in [deletion][unclear]~~xxx~~[/deletion][/unclear] the  
different parts of the community  
the happiest consequences must  
necessarily result; It is  
[deletion][unclear]~~x~~[/deletion][/unclear] a national spirit that  
[deletion][unclear]~~x~~[/deletion][/unclear] has produced the happiness  
prosperity independence &  
conquering energy of this  
people; It has contributed  
much ~~to~~ ~~view~~ [deletion][unclear]~~xxxx~~[/deletion][/unclear] increase  
the arts & to extend the  
sciences & it will finally  
~~render them perfect~~ carry  
them near to perfection. –

**RI MS HD/13/C, p. 065**

65

The union of sentiment &  
feeling in <the different parts of> a people is  
always connected with  
immense advantages. It  
forms what may be  
called the national spirit  
which is uniformly the  
source of ~~improvements in~~

~~the condition of man~~  
~~rapid extension in the~~

~~arts & sciences~~ ~~the health~~

& the happiness & prosperity  
of independance & conquering  
energy. –

**RI MS HD/13/C, p. 066**

[Blank page]

**RI MS HD/13/C, p. 067**

67

**RI MS HD/13/C, p. 068**

The <unequal> division of property &  
of labor; the difference of  
rank & condition amongst  
Mankind are ~~in fact~~  
the [deletion][unclear]~~xxxxx~~[/unclear][/deletion] ~~of~~ sources of

power in civilized <life> ~~society~~  
its moving causes & even  
its very ~~life~~ soul.  
And in considering  
~~the~~ & <in> hoping that the  
human species are capable  
of becoming ~~more hap~~py  
& more enlightened & more  
happy; We can only  
expect; that the different  
parts of the ~~wonderful~~  
society should be more

**RI MS HD/13/C, p. 069**

69

intimately linked together

by means of philosophy  
& the arts; that they  
should act as the  
children of ~~deity~~ I one  
parent with one determinate  
ends so that no  
exertions <should be lost> no power ~~should~~  
~~be lost~~. rendered useless.  
I this view we

do not amuse our  
selfves with [deletion][unclear]~~xxxxxxxx~~[/unclear][/deletion] delusive

dreams concerning the infinite  
perfectibility of the human  
species: the annihilation of  
labor disease & even death. –

; But We reason by  
analogy from simple facts

**RI MS HD/13/C, p. 070**

We consider only ~~the~~ a  
state of human progression  
rising out of its present  
condition. We look

for a bright day of  
which we already perceive  
the dawn. –

…

**RI MS HD/13/C, p. 071**

71  
Sulphurated hydrogene gas  
has all the properties of  
an Acid –  
1 it exting[superscript]s[/superscript] flame 2 it is  
not inflammable –

3 It is soluble in water. –  
4 It is produced in all  
cases by the decomposition  
of water.

[Horizontal rule]  
~~1 To make the inflammable~~  
1. To Make the non inflammabl  
air inflammable by passing the  
electrical spark through it &  
to ascertain whether the  
difference in its degree of  
inflammability is owing to

**RI MS HD/13/C, p. 072**

To try what kind of leather  
will be made by immersing

skin in Muriate of Tin

~~xxx~~ –

**RI MS HD/13/C, p. 073**

73  
26 –

Found that during the  
conversion of green muriate  
of iron into red no  
Ammoniac is formed as  
I had heretofore suspected –  
Green muriate of iron is  
apparently very soluble in Alcohol  
might not this solution  
impregnated with Nitrous gas  
become a good solution

for eudiometrical exp[superscript]t[/superscript]s. –

[Horizontal rule]  
Outlines of a paper on  
Galvanism. –  
Introduction of the subject  
by general views – Galvanism  
is electricity produced in Arrange  
ments consisting wholly of conductors  
How is this electricity excited  
merely from their contact or  
from a new principle of electrical  
action; Or from chemical changes

**RI MS HD/13/C, p. 074**

M[superscript]r[/superscript] Volta & many of the foreign  
philosophers adopt this last opinion  
& support it by an exp[superscript]t[/superscript]  
esteemed fundamental; namely  
that when two metals are  
brought in contact & separated  
they are found in opposite states  
of electricity; but this exp[superscript]t[/superscript]  
does not in the least show  
that the phaenomenon is owing  
to their arrangement: for chemical  
agencies such as those of the  
atmosphere may be concerned: &  
~~though the action of~~ the  
Mechanical action of the metals  
may produce the effect &  
there is no reason from the exp[superscript]t[/superscript]  
of adopting the [unclear]new[/unclear] principle of  
a constant circulation of the  
electricity. –  
It is not necessary that  
we should ascertain if chemical  
agencies be concerned in the fundamental  
exp[superscript]t[/superscript] it will be sufficient to  
us to shew their power in  
the pile in which all the  
galvanic effects are much more

**RI MS HD/13/C, p. 075**

75  
distinct; M[superscript]r[/superscript] Volta considers  
the fluids in the common pile  
as conductors merely; but none  
of them <are> active unless they  
be likewise chemical agents: &  
their powers are not proportional  
to their conducting energy as  
for instance the exp[superscript]t[/superscript] with  
sulphuric acid. –  
When one metal only  
is used it is said that  
one of the fluids stands  
in the place of a metal  
but this fluid may be [unclear]indifferabl[/unclear]  
either sulphuret of P or water  
for instance in the case of the  
Tin; & the current of  
electricity is determined by  
the power of the substance  
to act; And in this  
respect there is a very  
curious relation between different  
chemical actions – Thus the  
metals which decompose water

**RI MS HD/13/C, p. 076**

appear to have the current  
on the side of part  
decomposing water; but  
those that act upon sulphuret

of potash & do not  
decompose water have the  
current on the side of  
the sulphuret & where  
both actions take place

there is a contest for  
the current. –  
– . probably Zinc & copper  
with double glasses & Zinc  
exposed to acid & copper  
to <sulphuret> will ~~undergo very little~~  
give very little power. – &  
still less when the order  
is reversed; But Zinc with  
acid & copper with caustic  
potash will probably act. –  
or sulphuret with copper; &  
Zinc with concentrated Sulphuric

**RI MS HD/13/C, p. 077**

77  
acid; but Zinc with solution  
of sulphuret & copper with  
acid will most probably not  
act at all.  
– The acids act very feebly

in producing galvanism: copper  
& silver with Nitrous acid  
very little; though much  
with Nitrate of Mercury  
Gold & Silver even act  
[deletion][unclear]~~x~~[/unclear][/deletion] but feebly; they ought  
to act powerfully with  
~~N~~ Sulphuret of Potash. –  
– Exp[superscript]t[/superscript] proving the dependance  
of electricity upon oxidation  
in which when a gold wire  
is made to compleat: the  
circuit on the oxygene side  
very little hydrogene is given  
out; but when silver wire  
very much: –

Probable Theory of

**RI MS HD/13/C, p. 078**

galvanism.  
When Water, acid, or  
Solution of Sulphuret act  
upon ~~an~~ ~~acid~~ Metal  
or upon charcoal; a  
change in Electrical equilibrium  
takes place. & the [deletion][unclear]~~xxxx~~[/unclear][/deletion] fluid  
becomes ~~positively~~ [unclear]~~xxxxxx[/unclear~~] ~~& the~~  
~~metal~~ negatively electrified &  
the metal positively; this occasions  
in current. & if there  
be but three classes of  
bodies two metals for  
instance & one fluid then  
the circulation will be thus

[Ink sketch with Z, C, and W]

**RI MS HD/13/C, p. 079**

79  
[Ink sketch with P, N, Z, C, and W]

[Ink sketch with Z, C, and W]

[Ink sketch with C, W, and Z]

The skin tomorrow  
D[superscript]r[/superscript] Thomson

**RI MS HD/13/C, p. 080**

Analysis or rather Composition  
of Artificial leather. –  
[deletion]13 ounce [unclear]xxxx[/unclear] [unclear]xxxx[/unclear] of isinglass[/deletion]  
~~in solution 11. 3/4 & 10 gr~~ains  
54 grains of isinglass  
were dissolved in 13 ounces  
of water left a residuum  
of about 2.5 grains of  
membrane. whole weight being  
12 oz. 3/4 Averdu: & 44  
grains  
[Horizontal rule]

~~54 grains Isinglass in~~  
~~10 ounces of water~~  
The space filled by the 11 3[supsercript]a[/superscript]/4

ounces & 40 grains of isinglass  
were filled by 11 3[superscript]a[/superscript]/4 & 23  
grains of distilled water. –

[Horizontal rule]  
50 grains left the same  
residuum being dissolved in 9  
oz of water gave 8 ~~1/2~~ 1/2 Av: & 93  
grains of  
The large filters weigh  
86 grains each

**RI MS HD/13/C, p. 081**

81

28 June  
The Lime Catechu.  
was of a ~~pale~~ <deep> yellow <leather yellow>  
colour. & in four days  
it being exposed the 24

had become mouldy  
in the top | the residuum was 3 gr 1/2

[Horizontal rule]  
52 grains leather pale  
red.

[Horizontal rule]  
Baked oak Bark the  
52 grains corresponding to  
60. was of a dense  
red brown – much of the  
Aromatic leather on Top –

leather brown gray

[Horizontal rule]  
20 The leather weighed 20 [unclear]~~xx~~[/unclear] grains  
[Horizontal rule]

~~The~~ ~~large~~ ~~plxxx~~ ~~f~~  
Old unbaked Oak bark  
was of a lighter brown  
leather red brown.

[Horizontal rule]

Ash Bark 66 grains

infusion at first of a ~~deep~~

**RI MS HD/13/C, p. 082**

green blue after three days  
became <brown> orange colored young  
Ash. fresh not two  
grains of precipitate –

[Horizontal rule]  
Old Willow inner bark red  
brown infusion

[Horizontal rule]  
60 grains outer Bark  
willow pale infusion almost  
of the colour of water –  
not quite a [unclear]~~x~~[/unclear] grains of

[Horizontal rule]  
precipitate.

[Horizontal rule]  
Outward Bark. Old  
Oak colour red brown  
browner than inner of  
willow – ~~not~~ not ~~x~~ ~~grain~~  
quite 2 grains of T~~annin~~ precipitate

[Horizontal rule]  
Angustura Bark no Tannin

**RI MS HD/13/C, p. 083**

83

2 Bark Old Oak very deep  
red brown.

[Horizontal rule]  
60 grains 2d Bark  
Old Willow scarcely colored  
not quite two grains  
of ~~Tann~~ precipitate

[Horizontal rule]  
Yellow Peruvian Bark light  
red.

[Horizontal rule]  
60 Inner Bark of Oak old  
colour bright brown  
leather 31 grains

[Horizontal rule]  
Young oak inner red brown  
not brown.

**RI MS HD/13/C, p. 084**

[Horizontal rule]  
Tumeric contains very  
little Tannin –

[Horizontal rule]  
Madder very little if

any..

[Horizontal rule]  
60 Bombay Cutch 47 grains  
leather red

[Horizontal rule]  
60 Bengal Cutch 48 grains

[Horizontal rule]  
Green Tea 19 grains & half

[Horizontal rule]  
Souchong tea 23 grains

[Horizontal rule]  
60 galls gave <94> ~~98~~ grains  
of Tannin. – Qu.

[Horizontal rule]

**RI MS HD/13/C, p. 085**

85

The 52 grains of Gelatine  
with galls gave 98 grains  
of dry leather  
[Horizontal rule]

The 52 grains of  
gelatine with Cutch  
give 95 grains  
but in this case  
there was a little loss

[Horizontal rule]

The true chewing cutch  
30 grains gave nearly  
35 grains of Cutch

[Horizontal rule]

Outside of oak bark  
gave 2 grains

[Horizontal rule]

No Tannin in Dragons  
Blood.

**RI MS HD/13/C, p. 086**

Sepr 2[unclear]5[/unclear] 1802 [unclear]~~x~~[/unclear] –  
Tried exp[superscript]t[/superscript]s with plumbago  
& silver with Muriate

of lime, Sulphuric acid  
& Water. – The silver

was the oxygene.

giving side & action   
was strong. –  
With gold plumbago  
& muriate of lime –  
gold was the oxygene  
giving side action strong  
Put by a pile with

cement

[Horizontal rule]  
Qu. will oxide of

lead combine with extract

try Quassia Bark &c. –

**RI MS HD/13/C, p. 087**

87

Galvanism.  
June. 9[supsercript]th[/superscript]. –  
Plumbago; with iron &  
Zinc & common water  
was the hydrogene giving  
pole. –  
Plumbago with zinc  
& sulphuret of Potash  
was the ~~oxygene~~ <hydrogene> giving  
pole; with iron &  
Sol. Sulpher no perceptible  
action.

[Horizontal rule]  
With plumbago charcoal  
& water action hydrogene  
given by the charcoal  
side – likewise with  
sulphuret of Potash

[Horizontal rule]  
To get plates of charcoal  
& plumbago with solution

**RI MS HD/13/C, p. 088**

of carbonate of Potash –  
Exp[superscript]t[/superscript] in the decomposition  
of Water by electricity  
We cement into a  
tube after Woolastons  
manner a good wire

[Ink sketch of wire cemented in tube]  
We then  
put air  
then water  
& another  
wire. Now  
in this case We ought  
to get inflammable air  
in the tube

**RI MS HD/13/C, p. 089**

89  
– July 10[superscript]th[/superscript] –  
~~At about~~  
– Exp[superscript]t[/superscript]s on the  
influence of a vacuum  
X of different gasses on  
the galvanic phaenomena

[Horizontal rules]  
at an inch <& half> of gas  
ie the Barometer gage  
standing at about 28.5  
the Barometer being at  
30.

**RI MS HD/13/C, p. 090**

Dec[supserscript]r[/superscript] 27[superscript]th[/superscript] 1802.  
Monday [unclear]xxxx[/unclear] Royce – 1..0.0 to pay

11.  
[unclear]xxxx Susan[/unclear] 1..0.0  
to pay. 8..6

**RI MS HD/13/C, p. 091**

91

Quere? may there not  
be two or three combinations  
of Gelatine & Tannin –

Mem[superscript]m[/superscript] to endeavor to ascertain  
this. –

[Horizontal rule]  
The Tanners ought to pay  
particular attention to the age  
of their bark very old bark  
will always have an immense  
quantity of red vertical layers  
which will contain proportionally

very little Tannin.

[Horizontal rule]  
Mem[superscript]m[/superscript]. Tomorrow to throw

down the precipitate from  
solution of galls; & expose it  
to alcohol then if it is  
pure Tannin it will be  
taken up may not the vinous  
smell of Tannin arise from  
the decomposition of mucilage  
Quere has not mucilage some

**RI MS HD/13/C, p. 092**

affinity for Tannin –  
[Horizontal rule]  
May not albumen & extractive  
matter combine?

[Horizontal rule]  
Quere is not some  
extract always taken up  
in the common processes  
of Tanning

[Horizontal rule]  
Artificial leather always  
becomes colored by exposure  
to air. Qu. is this  
from oxygenation & why  
does not the same happen  
to natural leather. –

[Horizontal rule]  
Tannin prevents extract  
from being acted upon by  
alumn?

**RI MS HD/13/C, p. 093**

93  
What is the precipitate  
given by alumen from  
Cutch after the leather  
has been seperated from  
it?.

[Horizontal rule]  
That light which at first  
overpowers our organs becomes  
under the influence of habit  
the language of the external  
world. So it is with science  
[Horizontal rule]  
The ~~young~~ <brood of the> Eagle though at first <like that of the bird of [unclear]xxxx[/unclear]>

dazzled & pained by the light

of the sun <the one> will not cease to

look towards it till He can

even rejoice in its splendour

But the other uniformly

avoids [unclear]xx[/unclear]. the glorious rays

**RI MS HD/13/C, p. 094**

speculations of the Orator, all  
the mighty combinations of  
words which constitute the  
spirit & life of our intellectual  
communications will at  
some period be remembered  
no more. But the Language  
of exp[superscript]t[/superscript] is universally  
intelligible & the truths  
it conveys can never be  
forgotten. In our imitations  
of Nature We have proceeded  
so far as to be able  
to produce if not a  
correct copy a beautiful  
imitation In which as  
in the work of a great  
artist not only the form  
is expressed but likewise  
the living power. –

[Horizontal rule]  
Dec[superscript]r[/superscript] 15[superscript]th[/superscript] gave M[superscript]rs[/superscript] J[superscript]s[/superscript] 9..6

**RI MS HD/13/C, p. 095**

95

with awe assimilate ourselves  
to his nature –  
The influence of science is not  
like that of literature founded chiefly  
upon the passions of men. It  
appeals to the Understanding  
& even the imagination  
is submitted to it. The  
facts of Chemistry as belonging  
to nature are founded upon  
no arbitrary assumptions  
& are independant of the  
caprices & fashions of the mind  
& the common fluctuations of  
opinion – ~~Language~~ <words> will  
change, taste must be  
modified; The works of  
Genius of one Nation. can  
never be justly estimated  
by another. nation. The Visions  
of the Poet the sublime}

**RI MS HD/13/C, p. 096**

We shall now be obliged to  
sacrifice artificial processes  
to the observation of  
the processes of nature –  
We shall proceed to  
worship her in her  
existing forms – We  
shall examine her  
in her grand operations.  
We shall shew how far   
Man has modifyed  
these operations –  
And in considering the  
the external Universe  
as governed [deletion][unclear]~~xxxxxx xxx~~[/unclear][/deletion]  
by a one intelligence

We shall in the nearest

Manner let it be spoken

**RI MS HD/13/C, p. 097**

97

[unclear]Fiedler[/unclear] has observed that

Alumine when suffered  
to remain long in contact  
with a solution of galls  
throws down from it both  
extract & Tannin & nothing

remains in the solution  
but Gallic acid. –  
Acetite of alumine  
seems to throw down  
extract; but it has  
no sensible action upon  
Tannin –  
Might We not separate  
extract from Tannin  
by muriate of Alumine.  
Then separate the Tannin  
by pure alumine & then  
separate the acid by lead.

**RI MS HD/13/C, p. 098**

Mem the plumbago  
exp[superscript]t[/superscript] & the exp[superscript]t[/superscript] with  
the iron – ie sulphuret  
in one side & acid  
in the other

[Horizontal rule]  
Zinc gives very  
feeble effects –  
Tin with Acid  
And sulphuret –  
probably the intensity  
of the action. –

**RI MS HD/13/C, p. 099**

99

Tyrian  
Purple

[Horizontal rule]  
Better Principle

[Horizontal rule]  
Quassia  
Hops  
Wormwood  
Camomile  
Digitalis  
Lord Carrington

[Horizontal rule]

**RI MS HD/13/C, p. 100**

[Horizontal rule]

Duke of Marlborough

[Horizontal rules]  
Water  
eight ounces  
gave on evaporation

3/4 of a grain

[Horizontal rule]  
– Sulphate of Lime –

– do of Magnesia  
& Muriate of Magnesia  
Muriate of lime – –  
[Horizontal rule]  
Mem to state my  
order to Thomson

[Horizontal rule]

**RI MS HD/13/C, p. 101**

101  
Analysis of Lord  
Dundas; –  
Muriate of Potash  
it gave in 100  
grains  
~~17~~ 162 grains  
of Muriate of  
Silver  
And 86 grains  
of Nitre  
If 100 [unclear]x[/unclear] 18 : 162

13

296

62

29.16

29..5 Acid

**RI MS HD/13/C, p. 102**

June. 24. 1802. –  
48 grains of dry  
skin. – is a long  
piece –  
68 grains a triangular  
piece, –  
170 grains large  
piece of dry skin  
217 grains of thick  
[unclear]mat[/unclear] – had been boiled

[Horizontal rule]  
~~Roasted~~  
60 grains of Old  
Oak Bark lost by drying  
at about 500˚F. – 8 grains  
for – half an Hour –

**RI MS HD/13/C, p. 103**

103

June 27.  
84 grains were now  
weighed by the 48 after  
being monitored – &  
prepared for Tanning  
131 were given by the  
68  
328 grains were given  
by [deletion][unclear]~~xx~~[/unclear][/deletion] 170 grains

~~2~~17  
The small piece  
was put in Bark  
the 2d in Galls  
& the third in  
Cutch.

~~420~~

~~19~~

~~290~~  
170 is to 328 68.131

68  
2624  
1968  
22104

131  
170

510  
190  
22230

**RI MS HD/13/C, p. 104**

June 27. 1802. 48 grains of dry  
skin dried in the air witht sunshine  
& examined on a dry day. ~~after~~  
[deletion][unclear]~~xxx~~ ~~xxxxxx~~[/unclear][/deletion] having been immersed for  
some days in Water so as to  
be perfectly fit for Tanning weighed  
84 grains  
– A piece of the same which  
weighed 68 grains / moistened  
weighed. 131.  
Another piece 170. when  
moistened gave 328 grains. –

[Horizontal rule]  
1 was put into solution of  
Bark. 2 into Galls &  
into Cutch. – they were  
tanned very slowly & taken  
out sep[superscript]r[/superscript] 23[superscript]d[/superscript].

[Horizontal rule]  
They weighed whilst yet moist /. –

when dry

~~1.~~ [unclear]~~xxx~~[/unclear] grains  
48 – 1 = 102: grains 62

68 – 2 = 186 100

170 – 3 = 403 208

**RI MS HD/13/C, p. 105**

105

To ascertain if the weight  
of the precipitate from a  
given quantity of [deletion][unclear]~~x~~[/unclear][/deletion] gelatine  
is influenced by its state  
of dilution  
A solution was made of  
18 gr[superscript]s[/superscript] of Gelatine of isinglass  
ie = to 28 of isinglass in  
8 ounces of distilled water

& the solution was divided  
into 4 portions –  
the first was precipitated by Galls  
& gave = to 11 grains  
the 2[supserscript]d[/superscript] was diluted whilst  
warm with 2 Zs of water  
& gave – 9/2

The 3[superscript]d[/superscript] with 4 Zs of water  
gave 8  
& the fourth with 8 D[superscript]o[/superscript] –  
gave. – 9  
Temp[superscript]e[/superscript] being between 65 &  
70.

**RI MS HD/13/C, p. 106**

The [deletion][unclear]~~xx~~[/unclear][/deletion] person who  
after having been long  
immured in darkness  
attempts to view the  
bright light of the  
sun would receive only  
from it an impression  
pain – To be able  
to see objects distinctly  
He must begin with  
the twilight & gradually  
strengthen his organs by  
habit. –

**RI MS HD/13/C, p. 107**

107

**RI MS HD/13/C, p. 108**

A piece of prepared skin 1/5 of  
an inch thick  
introduced into the strongest  
infusion of [unclear]Et[/unclear] [uclear]Cal[/unclear]. ~~was~~ appeared

to be well tanned in  
about 4 days – It was  
however suffered to remain  
in the infusion for ~~about~~  
a week – ~~When it was~~  
~~dried.~~ After this time  
it was dried – The leather  
was well colored & was  
approved of both as to  
appearance & texture by  
M[superscript]r[/superscript] Purkis & M[superscript]r[/superscript] Poole. –

[Horizontal rule]

**RI MS HD/13/C, p. 109**

109

– Considering this circumstance  
however & even allowing  
~~for~~ the coarseness of  
the [deletion][unclear]~~xxxx~~[/unclear][/deletion] exp[superscript]t[/superscript] detailed  
it is evident that  
the Ex[superscript]t[/superscript] ~~of~~ Cat. ~~cannot~~  
cannot contain much  
less than 2/3 Tannin –  
From some exp[superscript]ts[/superscript] that  
have been lately made  
it appears that the  
best oak bark does  
not contain ~~more~~ <so much as> than  
1/10 Tannin –  
So that 1 lb. of Ex[superscript]t[/superscript]  
must be worth at least  
7.lb. of oak bark.

**RI MS HD/13/C, p. 110**

that passed through the paper  
was nearly pellucid & of  
a bright red colour. –  
The substance remaining upon  
the filtre when dried ~~by~~  
~~the common~~ exposure to

air weighed about. 1[deletion][unclear]~~x~~[/unclear][/deletion]08

grains  
In an exp[superscript]t[/superscript] made some  
time ago it <was> found that  
20 grains of [deletion~~xx~~] isinglass  
when <perfectly> [deletion][unclear]~~xxxx xxxx~~[/unclear] ~~in water~~[/deletion]  
precipitated from their  
solution by infusion of  
galls gave 56 grains  
of leather dried at the  
common temp[superscript]e[/superscript] – This  
leather was however capable  
of being deprived of some  
water by a higher temp[superscript]e[/superscript]

**RI MS HD/13/C, p. 111**

111

– Anna thou art lovely ever  
Lovely in tears  
L  
In tears of sorrow bright  
Brighter in tears of joy

55.3C 108

36

648

324

55 3888 70

55. 36: 125

16 385

815 38

375

55 4565 8

0

**RI MS HD/13/C, p. 112**

The subjects of science  
are as immutable  
as ~~they~~ nature  
they do not belong  
to Man they are  
part of the universe

[Horizontal rule]  
odd effects of the  
invisible rays. –

~~M[superscript]r[/superscript]~~ Exeter Essays

on this subject

M[superscript]r[/superscript] Dennis & M[superscript]r[/superscript]  
Reynolds

**RI MS HD/13/C, p. 113**

113  
In every Natural form shall be  
Lineaments of sympathy.

–:  
Where the hollow blast alone

To its sandy burden soars

**RI MS HD/13/C, p. 114**

I now appeal in the cause  
of Chemistry to those who  
are placed from their situations  
above all wants; & who are  
neither obliged either by the  
feelings of ambition or of  
immediate applications to  
study the sciences –  
And if exercise be considered as essential  
to the health of the body an appeal to sensible  
objects is likewise to the mind

[Horizontal rule]  
It is then that the human  
spirit is most full of life  
& power when it perceives  
the traces of new facts &  
of new combinations when it

views

**RI MS HD/13/C, p. 115**

115

at least become virtuous.  
~~&~~ ~~his mind will be formed~~  
~~by good & regular habits~~. –  
His disposition at present  
is good; but his habits are  
irregular. These habits you  
will easily correct without  
pain; at a future  
period he will thank  
you – & if indeed the  
benefits He may derive  
from you are at all  
analogous to those which  
his brother has derived  
He will never forget  
his instructor – –

**RI MS HD/13/C, p. 116**

My dear Sir,  
The little boy  
who brings you this letter is  
my brother – It is my desire  
& it is my mothers desire  
that He should become your  
pupil. –  
I fear his mind at  
present is in a very  
uncultivated state; but He  
seems to possess sensibility:  
which I have been accustomed  
to consider as the foundation  
of all power & activity. –  
Under your tuition at  
all events, He must be  
improved & if He ~~does~~ is  
not <capable of> becoming learned, He will

**RI MS HD/13/C, p. 117**

117

**RI MS HD/13/C, p. 118**

Exp[superscript]t[/superscript]s on Tanning

[Horizontal rules]  
Chesnut

[Horizontal rule]  
180 grains of the epidermis of

chesnut [unclear]xx[/unclear] gave 11 grains of

tolerably dry leather –  
color yellowish brown –  
Do. of the second bark –  
18 grains. dark brown –  
D[superscript]o[/superscript] – 3[superscript]d[/superscript] bark intern. 28.  
brown.

[Horizontal rule]  
Oak – E 180 –

Epiderm. brown – 13 grains  
[Horizontal rule] 1  
2 bark black (.red 11. 18 grains

3 bark – light 32 grains

[Horizontal rule]  
Willow – 180.  
Outside bark with part of inside 30

Inside bark – 31.

[Horizontal rule]  
Elm – 180 –  
Inside bark – 18. –

**RI MS HD/13/C, p. 119**

119

100 grains of Extract of Cat  
100 grains  
100  
100 grains of Ext: Catech

~~dissolved~~ acted upon by <two quarts of> boiling

water were almost wholly  
dissolved; & the residuum appeared  
to be extraneous matter which  
had been mingled with the  
extract. –  
To this [deletion][unclear]xxxxxx[/unclear][/deletion] <infusion> ~~was ad~~ded

[deletion][unclear]xxxxxx[/unclear] measures[/deletion]

[deletion][unclear]x x[/unclear] of the strongest[/deletion] Solution

of Isinglass ~~till no more~~

~~precipitative~~ ~~wa~~ was added

till ~~no more~~ [unclear]~~xxx~~[/unclear]

the saturation of the Tannin

was compleated. –

The whole mixture was  
now ~~carefully~~ filtrated – The liquor

**RI MS HD/13/C, p. 120**

~~2~~ 19  
As the hydrogene obtained several  
times in the experiment with ice  
probably arose from a solution of  
some of it when the water was  
thawed & a subsequent liberation  
of it I resolved to try if  
when acetate of lead was  
dissolved in the water any  
gas would appear / In this  
case when the oxydating pole

was of copper ~~gas did~~ ~~appear~~  
in one case there probably  
was a little hydrogene but  
this was as there is every  
reason to believe from the

<common the predisposed> action of copper upon the  
water

[Horizontal rule]

Silver was used & in two  
experiments; no hydrogene was  
evolved; nor was any lead revived  
during the thawing of the ice –

**RI MS HD/13/C, p. 121**

121

the galvanic current was  
passing through it. & melted  
it again always with  
the production of gas –  
yet. I beleive hydrogene  
mingled with a little  
atmospheric air –

[Horizontal rule]  
Mem plumbago to asctn  
whether with lime it oxidates.

[Horizontal rule]

To try the galvanic broken  
circle with the electrical machine  
ie to convert ~~galvanism~~ <electricity into> into  
~~electr~~

[Ink sketch of experimental apparatus]

**RI MS HD/13/C, p. 122**

a diminution of surface  
both in galvanism & electricity  
occasioned an increase of  
intensity of power – & of  
course that if oxygene  
& hydrogene were water  
combined with electricity ie + &  
– that when the two  
metallic surfaces were

made of different sizes

there out to be a

correspondently small proportion  
of gas produced as I had  
found  
before [Ink sketch of experimental apparatus]

[Horizontal rule]  
Froze the water between  
the currents. at the moment

**RI MS HD/13/C, p. 123**

123

greater than that of the  
hydrogene, ie the proportion

[Horizontal rule]  
but if the potash be  
put as the hydrogene side  
then as the water is the  
exciter perhaps there will  
be less difference –

[Horizontal rule]  
ascertained to day that  
Leather is composed of nearly

20. Gelatine and; 36 or 37  
Tannin – ie moist

[Horizontal rule]  
– Dec[supsecript]r[/superscript] 17 –  
Having conceived two capital  
exp[superscript]ts[/superscript] concerning the decomposi

tion of water I resolved to  
put them into execution –  
The first was to prove that

**RI MS HD/13/C, p. 124**

Dec[supserscript]r[/superscript] 12. 1801.  
Discovered to day that when  
positive electricity was passed  
into water; & dissipated into  
air without the formation of  
a circle – if the wire was  
of silver oxide was produced  
but no gas !!! ie there  
were no sparks – !!  
from air gas was formed  
– When negative was excited  
from air gas was formed

but no oxide !!!

[Horizontal rule]  
Quere? suppose if caustic  
potash which conducts much  
better than water; be put as  
the oxygene giving side & water  
as the hyd[supserscript]e[/superscript] giving side will  
not the quantity of oxygene be

**RI MS HD/13/C, p. 125**

125

At the end of the exp[superscript]t[/superscript]  
the water was taken out  
of the glass – & in consequence  
on account of the permeability  
of the gold beaters skin  
much of the fluids were  
lost about 3 gr[superscript]s[/superscript] of H[superscript][unclear]wr[/unclear][/superscript] &

2 of O[superscript][unclear]wr[/unclear][/superscript] were however  
preserved for examination –

NB. a whitish matter  
had fallen to the bottom in

the neg[superscript]e[/superscript] tube; [unclear]2x[/unclear] from the glass

**RI MS HD/13/C, p. 126**

a little above the level of  
the <water in the> tubes – the water in  
the O Tube diminished that  
in the hy – tube increased  
the gold beaters skin was  
acted upon & became red  
in some of its parts, throwing  
down a minute quantity  
of reddish matter –  
both gold wires were acted  
upon one became pale in  
the acid wire / the other  
became black / Qu. had the  
[unclear]xxxx[/unclear] from the Glass –  
In the hydrogene tube the  
glass was acted upon &  
rendered white wherever  
it was in contact with  
the hydr[superscript]n[/superscript] wire

**RI MS HD/13/C, p. 127**

127

them to inflame phosphorus

by the parallel rays

from a mirror

as in Pictets exp[superscript]t[/superscript] for

a course –

[Horizontal rule]

To try tomorrow Zinc

& copper in solution of

sulphuret likewise to try  
Zinc & copper in muriatic  
acid. likewise in Nitric

Acid  
[Horizontal rule]

Dec[superscript]r[/superscript] 3. Thursday. The great

galvanic exp[superscript]t[/superscript] was concluded –

during the whole of the time

that it was carried on Acid

was forming in the oxygene tube

& alkali in the hydrogene tube

the water in the glass being

**RI MS HD/13/C, p. 128**

Electrical exp[superscript]t[/superscript] let a receiver  
of glass – For instance of  
this size be ~~partially~~ partially  
exhausted; let there be then  
thrown into it from another  
receiver Nitrous gas. –  
will not electricity be  
as the Nitrous acid formed will

given out; ~~if there is~~

be better conducter than either of the [deletion][unclear]~~xxx~~[/unclear][/deletion]  
if there <is> any let a number of   
gold or platina points  
be suffered to stand  
in the globe to collect  
it thus

[Ink sketch of experimental apparatus]  
inductor  
water  
& frost  
the same  
will not the  
Knob give sparks –

[Horizontal rule]  
Quere has bennets electrometer

been ever tried in an

an exhausted receiver or

on a receiver during exhaustion

**RI MS HD/13/C, p. 129**

129

[Ink sketch of experimental apparatus]

Distilled  
water

[Horizontal rule]  
Make the tube of sealing wax –  
[deletion][unclear]~~xx~~[/unclear][/deletion] or of || glass covered with  
sealing wax  
[Horizontal rule]

When a gold wire was  
put into a galvanic circle  
so as to give out oxygene –  
the quantity of hydrogene on  
a corresponding gold wire was  
as + 1: but when a silver  
wire which could oxydate was  
put it was as + 3 does not  
this prove the [deletion][unclear]~~xx~~[/unclear][/deletion] dependance of  
galvanism upon oxydation

**RI MS HD/13/C, p. 130**

Mem to pass Diamond over  
Hydrogene to form Carbonated  
hydrogene – likewise to attempt to get

the gaseous oxide of carbon from it by means of oxide of Zinc

[Horizontal rule]  
Mem[superscript]m[/superscript]. To try with a little  
cup of Tin whether <the> Galvanic  
the galvanic production of alkali  
will take place / ie ~~in a little~~

let the cup form the hydrogene

giving metal thus

[Ink sketch of experimental apparatus]

siphon filled with water

cup of gold

cup of tin

oxygene giving pole

Hydrogene giving pole  
The hydrogene giving cup may be filled  
with muriate of lime that would give  
no precipitation with Ammoniac –. This apparatus

shall be ordered on Monday.

[Horizontal rule]

Another apparatus for ascertaining whether  
the atmosphere has any thing to do with  
the galvanic production of alkali & acid –

**RI MS HD/13/C, p. 131**

131

26  
Charcoal gives wonderfully vivid  
ignition when made to  
connect the ends of a galvanic  
battery together

[Horizontal rule]   
Mem to try the  
Combustion of charcoal in  
Muriatic Acid by the galvanic  
spark. –

[Horizontal rule]

Quere is it the best  
fluid conductor; or solid  
conductor that gives the  
oxydating influence, or the  
worst; No?

[Horizontal rule]   
M: To try a galvanic  
battery with large surfaces of  
charcoal with a view to  
produce galvanic effects and a gas  
to those produced by ~~single~~  
large double plates –

[Horizontal rule]  
Cups of Tin plate or of iron coppered –

**RI MS HD/13/C, p. 132**

glass seemed to be a little acted upon

[Horizontal rule]  
Copper; would not act with either  
iron, Tin or lead as double  
plates with Solution of Sulphuret,

[Horizontal rule]  
21. 14 plates of iron &  
silver with Solution of Sulphuret  
of potash acted with intensity

the silver formed the  
oxyg arc –

[Horizontal rule]  
23. Copper acted with iron  
with considerable intensity ie iron  
Copper. Solution of Sulphuret  
The copper was the oxidating side  
& the iron the gaseous side –

[Horizontal rule]  
Tin & copper act intensely  
with Sulphuric acid the tin is  
the oxydating side –

[Horizontal rule]

**RI MS HD/13/C, p. 133**

133

given out in all the places of  
the water whilst oxygene is fixed  
in all the places of the sulphure  
[Horizontal rule]

Iron with Sulphure & water produced  
no effect with acid the usual effect

[Horizontal rule]

Iron in acid, Silver in sulphure

produces the same effects as  
sulphure silver & acid –  
Iron in sulphure, Silver in Sulphure

produced sensible effect. NB: a

little copper adhered to the iron  
from its action upon oxide  
of copper previously dissolved in  
the acid – The ~~are~~ metal in  
the place of the silver gave  
out oxide

[Horizontal rule]  
In the minute experiment the  
water in the: oxygene tube with 4  
troughs, soon obtained the power   
of reddening tincture of turnsoyle

[Horizontal rule]  
In about 10 hours one part   
of water tasted alkaline & the  
other acid – on the alkaline side the

**RI MS HD/13/C, p. 134**

39 grains is as

[Horizontal rule]  
20 Novr. Galvanic exp[superscript]t[/superscript] – Friday  
of the glass tubes employed each weighs  
31. grains 1/8 by M[superscript]r[/superscript] Accums scales – 20 grains  
V1. V. 1/8 –  
The gold beaters skins each weigh  
~~1/4 &~~ 3/8 of a grain –

[Horizontal rule]  
six grains of water was introduced  
into each tube –  
The gold wires employed weigh  
4 grs & 1/4 – each

[Horizontal rule]  
Other experiments in galvanism  
when silver was connected with  
Sulphure of Potash – & water oxidation   
took place in the series connected  
with the water ie in the place of  
the Sulphur – hence there is every  
reason to believe that hydrogene is

**RI MS HD/13/C, p. 135**

135

through his trembling frame –

**RI MS HD/13/C, p. 136**

~~energy~~ – life –  
~~Was~~ The blood that

rolled through

~~your~~ <their> veins –  
~~The infant~~ <Was the> germ of my  
<bodily> power.

[Horizontal rule]

Their spirits gave me no germ  
of Kindling energy. –

[Horizontal rule]  
The feelings the ideas that arise  
From nature & humanity are those  
That love the human breast. The living fire  
Of pleasure interfused ~~acts like a deity~~

Acts like a deity <amidst mankind> warms & expands  
All human hearts ~~by [unclear]xxxx[/unclear]~~ <by purest> ~~of~~ sympathy  
Connecting them – The ~~seed~~ of love

Sown in our bosoms e’er we view the  
light  
~~Expand & grow~~ upon the fertile soil  
Grow flourish & produce the richest fruit  
when nurtured by ~~humanity~~ – <the> genial influence

of kind humanity. Even In the mothers lap  
Whilst yet He draws his life from her  
existence whilst yet the form of orbed

**RI MS HD/13/C, p. 137**

137

worlds –

They are far above the skies. –  
They Kindle in the stars  
They dance in the light of

suns  
Or They ~~live~~ in the comets  
white haze  
~~Or far beyond visible  
things –~~

~~They are mingled with~~  
~~unknown life. –~~  
These poor remains of the

frame  
Were the source of the

organs of flesh  
That feel the control of  
my will  
That are active & mighty  
in me. –  
He gave to my body  
~~matter~~ – form

~~Is there~~ ~~aught~~ <is nought> in your  
dying ~~forms~~ limbs  
That gave to my spirit

**RI MS HD/13/C, p. 138**

~~What once was beauty & form~~  
~~Is mouldering dust. –~~  
~~What once was strength & power~~

~~Is still beneath the turf –~~

Is there aught in your dying forms

That gave to my Spirit energy. –  
Was the blood that rolled through  
your veins. –  
The infant germ of my power

[Horizontal rule]  
that whiten it came  
From the breath & the spirit  
of man. –

[Horizontal rule]  
Thoughts roll not beneath  
the dust. –

No feeling is in the  
cold grave. –  
Neither thought nor feeling  
can die –  
They have passed to other

**RI MS HD/13/C, p. 139**

139

My eye is wet with tears  
For I see the white stones  
That are covered with names –  
The stones of my forefathers  
graves. –

[Horizontal rule]  
No grass grows upon them  
For deep in the earth.

In darkness & silence the organs

of life

To their primitive atoms return

[Horizontal rule]

Through ages the~~ir~~ air [deletion][unclear]x[/unclear][/deletion]

Has been moist with their blood

Through ages the seeds of

the thistle has fed

On what was once motion & ~~life~~ <form>

[Horizontal rule]

The white cloud that floats  
through the heavens

Is pregnant, with ~~what~~

that which was life

And the moon beams

**RI MS HD/13/C, p. 140**

I am going into the country a  
shooting, said I when I had been  
ten months absent from my  
friends

[Horizontal rule]  
The elements arose from chaos  
Love was the consolidating  
principle that bound them  
together. pain is the  
projectile force

**RI MS HD/13/C, p. 141**

141

**RI MS HD/13/C, p. 142**

Where the rock of stature tall  
Hangs oer the rough <smoth> descending hill  
Beside the murmuring fall

Of a mountain rill

Above

~~Sheltered from every storm that blows~~

~~A little pile of earth is seen~~

~~Above the yellow copse uprose~~

~~About it the white thistle~~ grows

~~Its top with grass is green.~~ –

Above the yellow copse uprose

2 A little pile of ~~earth~~ <ground> is seen

1 ~~Above the yellow copse uprose~~

About it the white thistle grows,

4 Its top with grass is green

3 ~~Round it the thistle grows.~~ –

Though far away from [deletion][unclear]~~xxxxx~~[/unclear][/deletion]

~~Yet is this [unclear]xx[/unclear]~~ <hallowed ~~ground~~ earth> ~~a holy [unclear]xxxxx[/unclear]~~. –

Yet is this spot a ~~sacred~~ <holy> place

~~For mingled with the scented~~

It is the ~~place~~ <spot> of second <~~[deletion][unclear]xxxxx[/unclear][/deletion]~~> birth

To the last of [unclear]Aina’s[/unclear] race. –

~~Warmed~~ <Scorched> by ~~twenty~~ <forty> summer ~~suns~~ <days>

Has his mouldering ~~[deletion][unclear]xxxx[/unclear][/deletion]~~ <body> given

Light to feed the solar rays

Dew to cool the breath of

heaven. –

**RI MS HD/13/C, p. 143**

143

Behind that rock the dark blue sky  
First gave to thee her  
thousand lights  
~~It is not natures work~~  
A little ~~hill with grass is green~~  
That round it gently flows  
A little pile of ground is seen  
~~Around~~ <About> it the white thistle grows.  
Its top with ~~dusky~~ grass is green  
Waving as the Zephyr blows.

**RI MS HD/13/C, p. 144**

Such are the feelings chance or Nature give  
They warm our bosoms while the senses live  
To me no shaping intellect had given  
The moral sense the living fire of heaven.  
My wild untutored intellect ne’er saw  
The living light of natures sacred law. –

[Horizontal rule]  
Thus whilst intensely on the raptured sight  
Lives the eternal mountains wooded height  
Fair with the green the white the purple

ray. –   
And mingling with the vast

expansive sea. –  
The murmurs of the mountain torrent

die  
The bounded intellect exists in eye. –  
Where the rock of stature tall  
Hangs oer the green descending hill  
Beside the murmuring fall  
Of the mountain rill  
First upon thy cold blue cheek  
Did the breeze of ~~summer~~ <evening> play  
Behind that rock thou first dost

seek

The falling star of day. –

**RI MS HD/13/C, p. 145**

145

the new  
And vivid ~~features~~ <raptures> of existence rise.  
The inconceivable feeling carried him  
Above the earth & whilst He saw  
the heavens

[Ink sketch, possibly of metrical pattern]  
The propht arose in his ~~power~~ <might>  
and seized the arm of his power

When thou behind that rock

dost seek

The fallen star of day. –

**RI MS HD/13/C, p. 146**

Through the high palms the trembling moon  
beam shone  
And pleasant o’er the wanderers <burning cheeks> passed  
the cool breeze  
of evening moist with dews. –  
Upon his ear fatigued by silentness  
Rushed the wild murmurings of a  
mountain stream. –  
Whose waters sparkling with the  
yellow ~~light~~ <ray> ~~rolled through~~  
~~Rolld through dark woods~~  
gave life & beauty to a thousand  
flowers  
That tufting the green banks with  
spreading leaves  
Gave azure & the deeper hue of  
red –  
To the faint light reflected. –  
As ~~when~~ <to> the fever worn wretch  
who long  
Upon the couch of <burning> agony  
In wild & painful visions  
has beheld ~~the glo~~  
The gloomy <forms> of death & hell arise  
Flashes the day of health the light  
of joy. –  
So on the mind of moses did

**RI MS HD/13/C, p. 147**

147

To him no more the mighty past arose  
Majestic with its splendid images  
No more to him the obscurity of time  
was bright & splendid  
Weary & faint despair was on his soul  
A vacancy of though a painful listlessness   
Such as the fever worn wretch

– who long. –  
In agony. & felt the blood roll  
burning through his Veins

**RI MS HD/13/C, p. 148**

Now to the wanderers dull & tearful eye  
Oft turned towards the blue & misty nile  
The unfinished piles shone dimly visible  
In the last rays of evening. His tired feet  
Moved on so wearily that scarce the sound

Of life or motion shook the parched air  
~~Suspended motionless above the sands~~  
He long had travelled. For the fear of death  
And rapid vengeance nerved his youthful

limbs  
No pleasant feelings cheered him

for the thoughts

The renovated thoughts of former days rose in  
their dimness – But they mingled  
not with the dark unknown

Future. Still He travelled till

before him spread the mighty  
desart. As its skirted bounds  
where the green verdure grew  
he bent his steps. whilst above  
him rolled diffusive of creative light  
in their immeasurable rounds  
the glorious stars. –

**RI MS HD/13/C, p. 149**

149

Were mingled with the hot & parched  
sands.  
The moon bore The prophet lifted high  
His dark black eye & raised his hands

to heaven  
His visionary eye beheld the forms  
of real seraps in the shapeless clouds  
And in the deep & loudly murmuring

thunder  
The high behests of heaven. –

[Horizontal rule]

**RI MS HD/13/C, p. 150**

Injustice was not mine, nor did I see  
without a tear the death of sympathy.  
claim –  
Injustice was not mine, I did not  
claim –

fame Miss T

[Horizontal rule]   
mem the door before bed time

[Horizontal rule]   
passion

Is there a being in whose savage breast  
the hatred of a human thing can rest  
Is there a being who with gladness

glows  
When so like him burns with human woes  
To him I ween no gentle mothers  
care  
Gave mild enjoyment from a bosom  
fair  
[Horizontal rule]   
Nursed in the bosom of society  
We mingle with each other many joys  
And pains & passions by the countenance  
the living voice expressed ~~all felt~~

bind man to man  
Till sympathy is closely joined to life  
To spoil sooner. –  
Dark frowned the tempest in the sky  
The clouds  
Hung oër the brow of Sinai, the yellow  
leaves  
whirld round the bosom of the blast  
that bore them

**RI MS HD/13/C, p. 151**

[Ink sketch of eight-pointed star]

**RI MS HD/13/C, back cover**

[Blank]