



The *Nautilus Gears* *of Dr. Tiberius Hess*

The Mystery Solved



Clue Set One

Dundurn Castle



Clue Set One

Begin at my home in downtown Hamilton:
43.258915, -79.86591!

A	B	C	D	E	F
1	1	4	3	4	= 13

Latitude Offset

G	H	I	J	K	L
2	2	1	0	0	= 5

Longitude Offset

Clue #1
In the diagram below, calculate the length of the diagonal AD.
Place the digits in J and L.

Clue #2 13
The sixth prime number plus the lines in a villanelle.
 $19 + 3 = 32$
Place the answer in E and L.

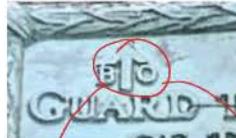
Clue #3
The Heights of Burlington in Hamilton abide.
War's bitter coot, a garden lost with Paradise close by.
Raised on copper, resting on stone, I speak of loss and illness.
These symbols share my verdant space and weather time with stillness.
Take my last two digits and from them subtract two.
The outcome yields a fragment of the answer you pursue.
Place the answer in H and F.
 $1926 - 26 - 2 = 124$

Clue #4 14
The number of pillars on the front of Laird A.N.M.'s mansion. (Dundurn Castle)

Clue #5 48
Place the answer in B and D.
Sophia (lived in Dundurn Castle)
The number of roosts in the dovecote near where Sophia once lived, minus the sum of the square of the first three prime numbers.
 $48 - 3^2 - 5^2 = 10$
Place the answer in K and L.

Clue #6 13
Reader, use the offsets you've uncovered to take you to a new destination. I ask you do that by adding them to the coordinates of my abode.

Clue #7 13
You will find yourself, as I did, near a standing stone of sea and land. Use its fifth line to reveal the meaning of this cipher:
PAMFCHQOPHEFOFNMKLSHZMO
THE AMOUNT OF A SURGEON'S DALE
The answer will place in your hands two digits that will guide you to my nautilus gears' place of concealment.
Onward!



Plaque at Burlington Heights on York Blvd.



JOHN DUFF
MACDONALD, M.D.
L.R.C.S. EDINBURGH
M.C.P.S. ONTARIO
FOR SOME YEARS A SURGEON
IN HER MAJESTY'S ROYAL
NAVY AND A PHYSICIAN IN
HAMILTON SINCE 1853
BORN IN GORMARTY
SCOTLAND,
NOVEMBER 18, 1819
DIED IN HAMILTON, ONT.
MARCH 10, 1901



in Hamilton Cemetery

Clue Set Two

Clue Set Two

Begin at the place of the standing stone.

Clue #1 (11)

16	3	2	13
5	10	11	8
9	6	7	12
4	15	14	1

A touch of misfortune may help those who seek; to fill the circle of this magic square.

Place the digits of the answer in H and E.

Clue #2 (11)

Below these numerals came the masses, their journeys just beginning. From strife and harm, with babes in arms, more sinned against than sinning. Convert the Roman characters to digits.

Place the last two digits in C and L.

Clue #3 (11)

Alchemic Symbols

Lead Copper Zinc

Sum the atomic numbers of these three elements.

Place the answer in B,K and G.

Clue #4 (11)

A mosaic of white in a half-wrought circle. I speak of birth and restoration. A checkered edge and rosettes two at a meeting of streets on a Block renewed.

Subtract the lesser from the greater of the dates here, then remove the number of Mary B. McQuister's children in 1890, then subtract another two.

Place the answer in D and F.

Clue #5 (11) Shakespeare

The number of the sonnet that contains the line: "And Time that gave, doth now his gift confound."

Place the answer in I and J.

Clue #6 (11)

Reader, use the offsets you've uncovered to take you to a new destination. I ask you do that by subtracting them from the coordinates of the standing stones.

You will find yourself, as I did, near a plaque, fourth from the left or right of seven. Use the three English words beneath 1859 to reveal the meaning of this cipher.

UGLBBLQTSCHACLELESNCJLEGNTKCOLEDCKSK
LATITUDE OF BOTH THE NORTH AND SOUTH POLES

The answer will place in your hands two digits that will guide you to my nautilus gears' place of concealment: Onward!

The little Blue Michael
is located in the Steam Museum
will be out in
Clue #7 Four

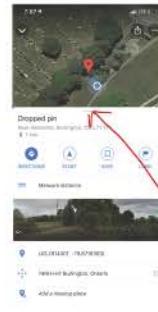
Lium Station on James St. N

1930

Door to Steam Museum office

1 2 3 4 5 6

Clue Set Three



Clue Set Three

43.256630, -79.71971
Steam museum steps

Begin at the place of the power.

A	B	C	D	E	F	
1	2	3	4	5	6	
Latitude Offset	9	0	1	4	= 14	
Longitude Offset	1	8	6	2	5	2 = 24

Clue #1

Find the only move for white that will not result in the immediate checkmate of the black King. Note the space the piece moves into as (x,y).
 $x = (3^3 - 3) = 81$
 $z = (x)^y = 81$

Place the digits z in H and E.

Clue #2

Sundial hole
Air on a G string by Bach arranged by Angel Whaley

My gnomon lets bright Helios cast the time
A dispelling Greek Priestly teach nearby.
A scholar's road doth my north frame
With a garden for a student named.
Subtract the last digit of my latitude
Enscribed from the last two digits of my longitude, likewise described.
 $99.5 - 49 = 50$

Place the two digits in C and F.

Clue #3

The August arrangement of this melody contains a letter. Find its numeric spot in the alphabet. Add 9.
 $G = 7 + 9 = 16$

Place the two digits in G and I.

Clue #4

Smallest amicable numbers are 220 & 284
 $220 \rightarrow 22$

Of the amicable numbers, we are the smallest, and I the lesser twin.
Take from me my first two digits, and your solution win.

Place the answer in J and L.

Clue #5

Herald marker for the Bay-bound century run.
I stand by Plain, ringed by death and garden.
A nautilus spiral marks the ground beside me.
And marked me too, all those whose race is done.
Add 35 to the number cut into me.

Place the answer in K and O.

$15 + 35 = 50$

Reader, use the offsets you've uncovered to take you to a new destination. I ask you do that by subtracting them from the coordinates of the place of power. John Cartshore owned the company that lost the Watertown engines.

You will find yourself, as I did, near a history plaque that speaks of manufacturing. Use the first word in the company name here and combine it with the last name of the owner of the firm that on this spot cast Koefer's engine. Use the words to decode this cipher:
**VLYDNPKXCSQPMVUBQEFZYD
ACENTURY HAS A HALF POUN**

The answer will place in your hands two digits that will guide you to my nautilus gears' place of concealment. Onward!

94



Clue Set Four

43265644 - 79.958123

former Cartshore Building
in Dundas

Also see "stain"
in Clue Set Two



Clue Set Four

Begin at the place of
the manufacturing.

Latitude Offset

A	B	C	D	E	F
	2	0	8	6	1
G	H	I	J	K	L
9	2	9	7	6	

= 17

Longitude Offset

A	B	C	D	E	F
	2	0	8	6	1
G	H	I	J	K	L
9	2	9	7	6	

= 32

Clue #1

The number of letters Blair McFarlane scratched
into the wall beside his father's pumphouse desk.



Place the digit in L. 6

Clue #2

Local History Archives
have Branch Libraries (p.2)

In a local archive I count the hours,
a United Kingdom adorns my face.
A harp, a ram, a courting couple,
a crown of feathers all take their place.
Count the number of harp strings and add
to them the two digits directly below my centre,
then multiply by two. $13+31=44 \times 2 = 88$

Place the resulting two digits in D and H.

मावदीता
GITA

Take the last four letters (in their romanized
version) of the name of this sacred text and
convert them to the numeric value of their
place in the alphabet. Add them,
then subtract 8. Cheggued GITA

$$7 + 9 + 20 + 1 - 8 = 29$$

Place the two digits in I and J. 29



Clue #3

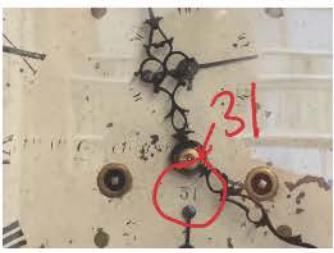
A prince and his loyal charioteer
discussing war and duty
eighth avatar of Vishnu, cerulean
in his beauty.

रामायण
RAMA

Take the last four letters (in their romanized
version) of the name of this sacred text and
convert them to the numeric value of their
place in the alphabet. Add them,
then subtract 8. Cheggued RAMA

$$7 + 9 + 20 + 1 - 8 = 29$$

Place the two digits in I and J. 29



Krishna, a blue-skinned
god was a charioteer. He is
often portrayed playing a flute

Clue #4
Roman numeral
referred twice
2061



I am a reflection of my true worth,
two centuries past when Wollstonecraft's
daughter birthed her monster.



Place the four digits in B,C, E and F.



Clue #5

The number of the page in the 1858 Shepard's
City of Hamilton Directory that first mentions:
"Crockery, China and Glass ware Dealers".

Place the answer in K. 7

Reader, use the offsets you've uncovered to take you to a new
destination. I ask you do that by subtracting them from the
coordinates of the place of manufacturing.

You will find yourself, as I did, where once a hotel
commanded a stunning vista. Use the five words
of the fourth line on the fountain for a fallen
hero to decode this cipher:

JQTISKBMIDQT JEJNKPSUQQTGYDKOR
ORBITAL PERIOD OF SATURN AND VENUS → 29
The answer will place in your hands two digits that will
guide you to my nautilus gears' place of concealment.
Onward!



Clue Set Five

There are 23 bells in the Basilica bell tower. The largest is called the BOURDON bell. BOURDON BR DN 2/18/4/14 = 38

Southern monument near Mountainview Hotel 43.244183,-79.975247

Ring Nebula in constellation Lyra "The Harp"

Clue Set Five

Begin at the place of the hero.

Clue #1

22 brothers and sisters have I, a choir of metal in a tower of song. The largest of all, to the faithful I call My carapace standing near a century long.

Take my 7-letter name, remove the vowels, then add the numeric values of the remaining letters' location in the alphabet, less 10.
 $38 - 10 = 28$

Place the two digits in B and L.

Clue #2

A	A	B	C	26
B	B	C	D	18
B	A	C	D	20
C	C	D	D	12

Each letter in the grid to the left represents a number. Each row and column, save one, is totaled for you. Please determine the missing two-digit sum.
10

Place the answer in G and H.

Clue #3

An escaped slave earned me, as did his generations. My walls still echo the word: emancipation! Take the year the home was bought subtract from it the year of the Northwest Ordinance:
 $1834 - 1787 = 47$

Place the two digits in L and C.

Griffin House

Clue #4

Though often made of gold, and shared with a betrothed, I am the stuff of dying stars and in a harp unfold.

Place my number in E and D.

Clue #5

HL
The Ring Nebula is massive object M51
Terry Beatty

The only branch of a mighty tree that bears a family name. An inn that served Niagara's trade, its guests were the same. And now within my modern walls carved figures mark a time when illness and a wish for home created art sublime.

Find the first date to the right of the vine, subtract 1616.
 $1402 - 1616 = 200$

Place the answer in F, J and K.

Reader, use the offsets you've uncovered to take you to a new destination. I ask you do that by subtracting them from the coordinates of the place of the hero.

SARA CALBRATH CALDER
You will find yourself, as I did, near the story of a Victorian dynamo. Use the three words of the name to decode this cipher:

QTLESPQWKGHHHQPKBQTLWSRQKUQTLOIQHFIPOWK
THE LAST TWO DIGITS OF THE NEAREST HOUR TIME TWO

The answer will place in your hands two digits that will guide you to my nautilus gear's place of concealment. Onward!

Clue #6

Google Map showing coordinates 43.277031,-79.789541

Clue #7

Sam Galtbrath Calder 1846-1914 Victorian Dynamo

Clue #8

43°12'01.3"N 79°45'58.8"W

Clue Set Six - Endgame



The Crystal Palace, built in 1860, was located in Victoria Park.

Clue Set Six

Begin at the place of the Victorian Dynamo.

Latitude Offset: $43.217031 - 79.766343 = 26$

Longitude Offset: $57 \ 2 \ 6 \ 6$ = 26
 $G \ H \ I \ J \ K \ L$
 $1 \ 5 \ 8 \ 7 \ 5 \ 2$ = 28

Clue #1
 For 30 years my walls of glass surveyed a park, Victorious.
 The expositions held within exalted our bounty glorious.
 Heir to a crown my stone he laid.
 Though the hand of Time he could not stay.

Place the year of my building, plus 6 in G, I, E and F.
 $1860 + 6 = 1866$

Clue #2
 تَمَرُّ الْأَنْجَلُوكَةُ وَالرُّوحُ أَتَيَهُ فِي تَوْبَرٍ كَانَ مَقْدَارُهُ خَسِينٌ أَلْفُ سَنَةٍ
 A passage in a sacred book measures a day in years.
 A passageway for angels, beyond this vale of tears.

To the 3 digit chapter and verse add 21 and place in C, D and K.
 $704 + 21 = 725$

Clue #3
 The number of vertices on a dodecahedron
 Add 37.
 $20 + 37 = 57$
 Place the two digits in B and J.

The angels and the Spirit will ascend to him during a Day the extent of which is fifty thousand years.

Duran 70:4



Doctors office, now part of Pandas Museum & Archives. Built 1848.

Artifact in the Doctor's Office

Clue #4

I am a doctor's office uprooted from my land,
 and now preserved, my purpose served.
 In a Valley Town I stand.

Take the year I was built
 $1848 - 1796 = 52$

Place the number in H and L.

Reader, use the offsets you've uncovered to take you to a new destination. I ask you do that by subtracting the latitude offset from the place of the dynamo. Next, add the longitude to that of the same location.

You will find yourself, as I did, at a place of ascension. Use the monogram and insect name of the four-winged wonder there to solve this cipher:

SURTSKFAQJFIRPKULKOKJALPF

THE ATOMIC NUMBER OF POLONIUM

The answer will place in your hands the last two digits that will guide you to my haughty gears' place of concealment.

The Endgame

Congratulations. You now have 12 digits (two from each clue set). Place the first and second digits from each clue in the indicated spaces below. At this location have I placed my nautilus gear. Your quest is at an end. Rest well.

43.	5-1	6-1	5-2	1-2	2-1	4-1
-79.	3-1	2-2	3-2	1-1	4-2	6-2

2 9 4 3 9 2
 7 0 4 1 9 4

All the numbers collected from the cipher answer



Location of gears is:

$$43.284392 \\ - 79.904194$$

stain or paper is
 an outline of the
 location

