in 1832 the collieries in the Coalville

area were connected to Leicester by

a steam railway

but in order to reach the Swannington

mines a major geographical obstacle had

to be overcome

i often walk on the Swannington incline

as you can see it's just the most

beautiful place

but today I’m here to meet Owen bailey

of the Swannington heritage trust

and he's going to tell me about why the

incline was built

hello if we had been standing here

before the incline was build we'd be

standing on the edge of a very steep

slope

a very very steep slope looking at the

ordnance survey map

it can be seen that the 140 meter

contour runs across just side of that

bridge

115 meter contour is just a few places

that way

which meant in that short distance the

the drop was for 25 meters

impossible to build a railway

and so the solution was to build an

inclined plane

Robert Stevenson who engineered the

railway he built a

deep cutting all the way down from the

top down to here

and then a steep embankment from here

all the way down to the bottom

which resulted in a

gradient of 1 in 17 all the way down

well here we are at the top of the

incline as we saw nearer the bottom

the incline itself managed to flatten

out

the very steep drop halfway down but

that

still resulted in an incline of 117

which was too much for a locomotive to

carry to hall

and so they relied on a winding engine

in the building just over here

to pull the wagons up the winding engine

could pull up three wagons at a time

at the end of a half mile rope by the

way when the original rope was

bought in 1833 it cost 78 pounds

which i believe is equivalent of 9 500

pounds today

so the engine was over here attached to

a flywheel

which was then attached to the winding

drum fortunately the engine can still be

seen today

after 144 years of sterling surface

it was saved when the incline was

dismantled and is now having a happy

retirement in the York railroad museum

which blended into the new coat of paint

most people are surprised to learn that

this machine here

is nothing to do with the incline when

the pits in Swannington closed down

by the mid 1870s they all filled with

water

which found its way down to the newer

mines in Coalville causing flooding

there

the solution was to put a very large

pumping engine into the shaft of

the Calcutta pit which was one of the

redundant ones

and this machine was used to lift the

pumping rods

out of the Calcutta shaft for

maintenance

the installation of the pumping engine

in Calcutta actually gave the incline a

second life

previously as you know even used the

whole coal up the incline

on the transmission to Leicester but

when the pumping engine was installed

it had to take coal down to feed the

boilers of the pumping engine

that continued from 1877

right through to 1947 when the pump was

converted to electric power

and the last empty trucks were hauled up

the incline early from 1948

and the incline was officially closed so

when the Swannington heritage trust bought

the incline in 1984

it had been used by builder for a number

of years to dump waste from the mines

and so the

incline up here which is in the deep

cutting was completely filled up with

mine waste church lane bridge here

was supported by mine waste because it

was damaged by mining subsidence

the potato lane bridge further up was

completely ruined

as well as the cattle arts bridge down at

the bottom there

so the trust spent several years

removing all the waste

the cattle arts bridge at the bottom was

renovated by

some of the last mining engineers from

Snibston mine in 1986.

the church lane bridge here was

renovated by the council

because that carries a public highway

and the potato lane pedestrian bridge

right at the top

was jointly renovated by the council

and the trust

but now that's fully maintained by the

trust can people walk the whole length

of the incline

unfortunately not there is a small patch

right at the bottom that the trust

doesn't own

so if you walk on down to see how high

the embankment is

or examine the cattle arts bridge which i

hope you will

then you have to retrace your steps and

come back up here again