# Adventure XXXII – The Adventure of the Priory School



Paul Churchill once quipped he had a hard time studying for Sherlockian quizzes, so inspired by Simon Goodenough's *A Study in Scarlet – A Sherlock Holmes Murder Dossier*, Paul began collecting Canonical artifacts around 1990 to help him remember each story. Over 1,500 artifacts later, Paul's 'Evidence Boxes' became legendary in the Sherlockian world as he displayed them at numerous Scion meetings.

What Paul could not find, he made. He became known as a master forger, and 'created' numerous 'genuine faux' objects, such as letters, documents, and telegrams. Paul was invested in the Baker Street Irregulars in 2006 as "Corot." After Paul's passing, the Evidence Boxes were bequeathed to Watson's Tin Box Scion Society, a Society Paul cofounded in 1989. Debbie Clark has maintained the Boxes and continues the practice of displaying the items from one of the Boxes at each society meeting.

Beth Austin assisted in this effort by photographing, annotating the items, and finding the quotes for many of the items, while Denny Dobry and Rusty Mason supported Paul's efforts by photographing each of the items, as well as developing a comprehensive inventory with notations of item's mentioned in the story. Each of the Boxes is posted with permission of Debbie Clark and Jacquelynn Morris.



Pictured is the milk can Mrs. Hudson would have in her kitchen to provide milk to Dr. Huxtable.

## From the story:

'Thank you, if I might have a glass of milk and a biscuit I have no doubt that I should be better.'



Pictured is a container of Fortt's Bath Oliver biscuits. Dr. Huxtable asked for a glass of milk and a biscuit to help him to recover from his fainting spell.

From the story:

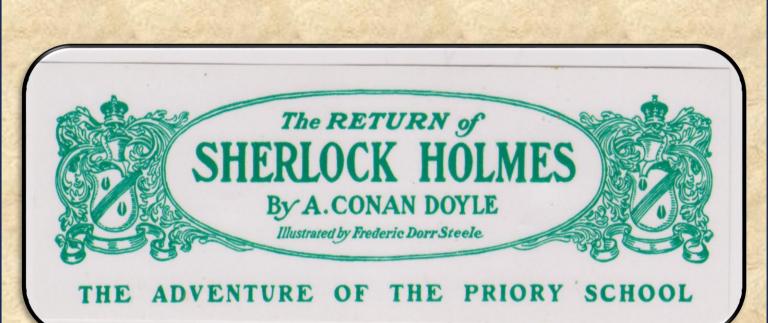
'Thank you, if I might have a glass of milk and a biscuit I have no doubt that I should be better.'



Pictured is Huxtable's return ticket stub to Mackleton after pleading for Holmes' assistance with the disappearance of Lord Saltire.

From the story:

'Return ticket from Mackleton, in the North of England,' said Holmes, drawing it from the watch-pocket. 'It is not twelve o'clock yet. He has certainly been an early starter.'



Pictured is a bookmark depicting the masthead of 'The Adventure of the Priory School' as it appeared in Colliers Magazine.



Pictured is a blank cheque from a Hallamshire bank, the area where the Duke of Holdernesse was Lord-Lieutenant.

## From the story:

'Holdernesse, sixth Duke, K.G., P.C.' half the alphabet! 'Baron Beverley, Earl of Carston' - dear me, what a list! 'Lord-Lieutenant of Hallamshire since 1900.'



Pictured is a period engraving of The Admiralty, Whitehall, where the Duke had once worked.

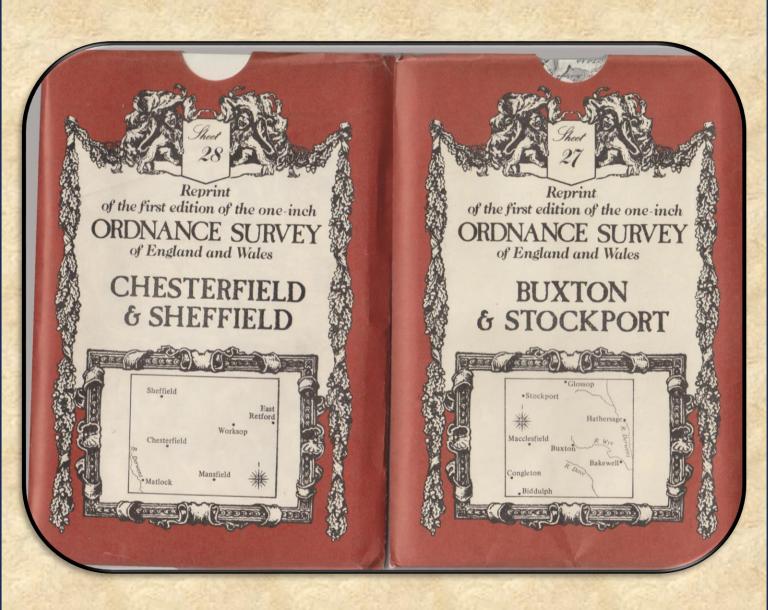
## From the story:

'Minerals in Lancashire and Wales. Address: Carlton House Terrace; Holdernesse Hall, Hallamshire; Carston Castle, Bangor, Wales. Lord of the Admiralty, 1872; Chief Secretary of State for- Well, well, this man is certainly one of the greatest subjects of the Crown!'



Pictured is the logo of the Order of the Garter. Holmes' encyclopedia of reference showed that the Duke of Holdernesse was a Knight of the Most Noble Order of the Garter (K.G.)

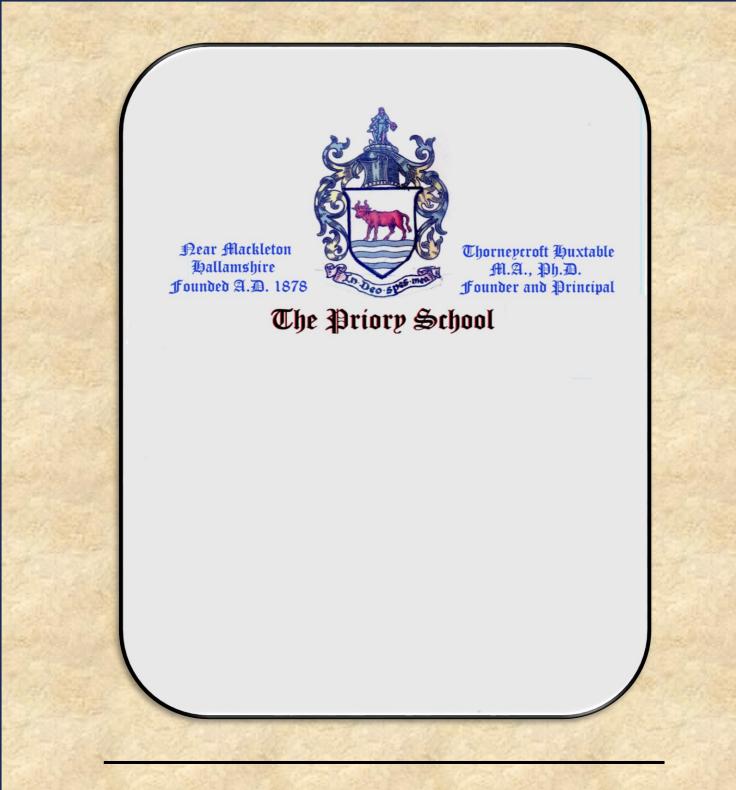
From the story: 'Holdernesse, sixth Duke, K.G., P.C. half the alphabet!'



Pictured are Ordnance Survey maps of Macclesfield/Buxton/Stockport and Sheffield/Chesterfield areas. Holdernesse Hall was in Hallamshire, an area in the City of Sheffield.

## From the story:

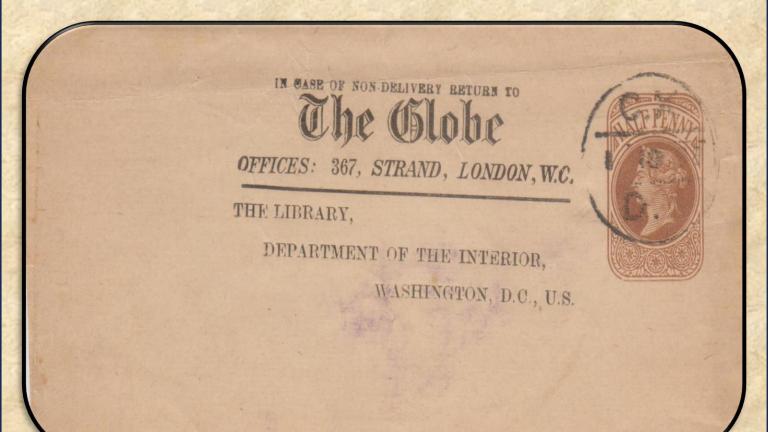
'Address: Carlton House Terrace; Holdernesse Hall, Hallamshire; Carston Castle, Bangor, Wales.'



Pictured is the letterhead stationary for the Priory School.

From the story:

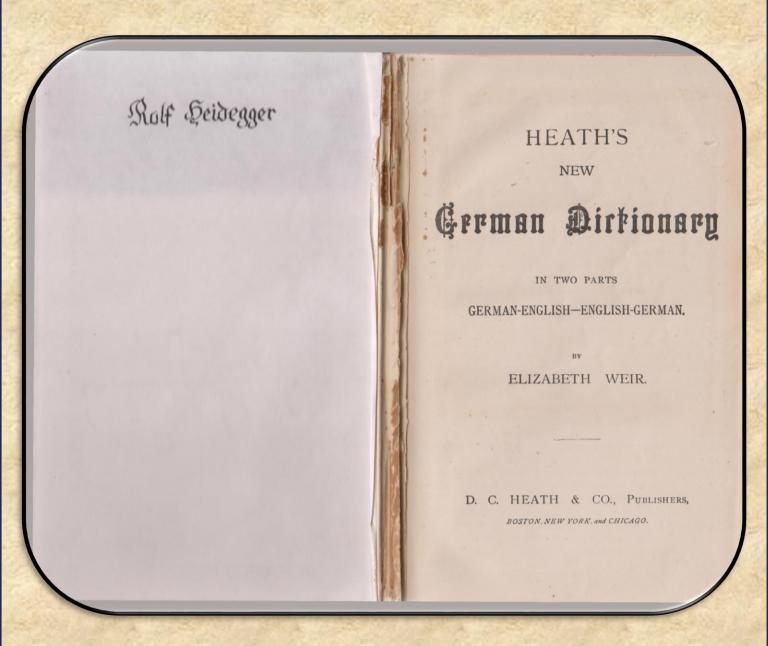
'I must inform you, gentlemen, that the Priory is a preparatory school, of which I am the founder and principal.'



Pictured is an envelope from the Globe newspaper, which had run an account of Lord Saltire's disappearance.

From the story:

'Exactly. We had tried to keep it out of the papers, but there was some rumour in *the Globe* last night. I thought it might have reached your ears.'



Pictured is Heaths' New German Dictionary, 1888, signed inside the front cover 'Rolf Heidegger' in German script. Heidegger was the German teacher for the Priory School.

### From the story:

'It was then that we ascertained that Lord Saltire had not been alone in his flight. Heidegger, the German master, was missing.'

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Pictured is Holmes notes about the case on his own notepaper. Holmes jotted down one or two memoranda n his notebook during the interview with the school master.

From the story: He now drew out his note-book and jotted down one or two memoranda. Duke of Holdernesse K.G., P.C., R.B., K.S.

Holdenesse Hall

Carlton House Terrace

Hallamshire



Dr. Thorneycroft Huxtable B.S., B.A., M.S., M.A., PH. D. Principal

PRIORY SCHOOL

MACKLETON, DERBYSHIRE

Pictured are the visiting, or calling, cards for Dr. Huxtable, the leader of the Priory School, and the Duke of Holdernesse, whose son was kidnapped from the school.

From the story:

A card was lying on the hall table, and the butler whispered something to his master, who turned to us with agitation in every heavy feature.

His card, which seemed too small to carry the weight of his academic distinctions, preceded him by a few seconds, and then he entered himself.



Pictured are the pins Holmes and Watson used when marking points on the map Holmes had obtained.

From the story:

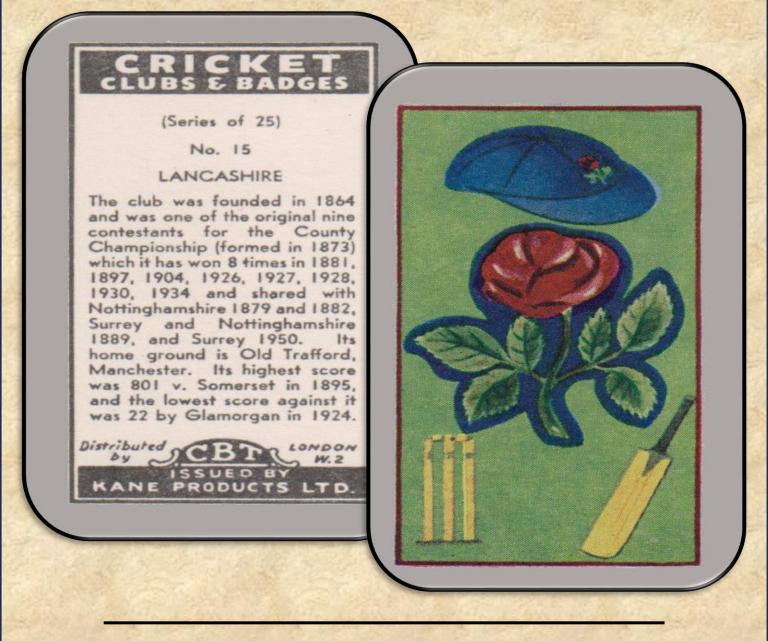
'This dark square is the Priory School. I'll put a pin in it. Now, this line is the main road.'



Pictured is the ordnance map Holmes obtained for the area around the Priory School.

### From the story:

He had obtained a large ordnance map of the neighbourhood, and this he brought into my room, where he laid it out on the bed, and, having balanced the lamp in the middle of it, he began to smoke over it, and occasionally to point out objects of interest with the reeking amber of his pipe.



Pictured is a cigarette card for the Lancashire Cricket Club's logo, a wicket, bat and cricket cap. Lord Saltire had a cricket cap on when he disappeared.

### From the story:

There was an agitated knock at the door, and an instant afterwards Dr Huxtable was in the room. In his hand he held a blue cricket-cap, with a white chevron on the peak.

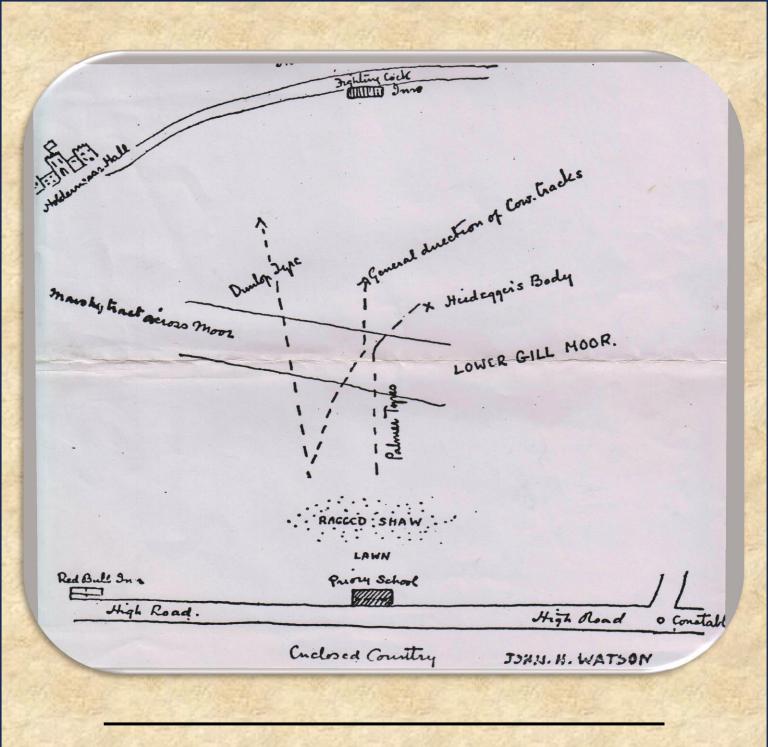
'At last we have a clue,' he cried. 'Thank Heaven at last we are on the dear boy's track! It is his cap.'

Pictured is Lord Saltire's cricket cap with the blue chevron on the front.

From the story:

There was an agitated knock at the door, and an instant afterwards Dr Huxtable was in the room. In his hand he held a blue cricket-cap, with a white chevron on the peak.

'At last we have a clue,' he cried. 'Thank Heaven at last we are on the dear boy's track! It is his cap.'



Pictured is the hand-drawn map of the area around the Priory School, with name of the artist, John H. Watson, on the bottom of the map.

### From the story:

'Look here, Watson! There is a watercourse across the moor. You see it marked here in the map. In some parts it widens into a morass.'



Pictured is the tyre patch kit used on Wilder's tyre, a Dunlop.

## From the story:

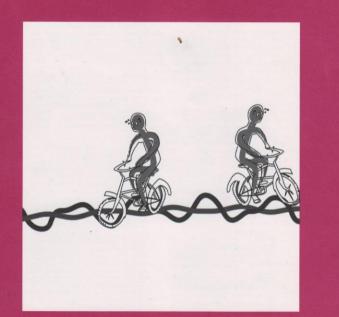
'This, as you perceive, is a Dunlop, with a patch upon the outer cover. Heidegger's tyres were Palmers, leaving longitudinal stripes.'



Pictured is a section of the Dunlop tyre, which Holmes found tracks of a Dunlop tyre, with a patch upon the outer cove among Heidegger's Palmer tyre tracks.

### From the story:

'A bicycle certainly, but not the bicycle,' said he. 'I am familiar with fortytwo different impressions left by tyres. This, as you perceive, is a Dunlop, with a patch upon the outer cover. Heidegger's tyres were Palmers, leaving longitudinal stripes.'" MATHEMATICS MAGAZINE



It's Okay to Be Square If You're a Flexagon

- Loxodromes: A Rhumb Way to Go
- · Which Way Did You Say That Bicycle Went?

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### Which Way Did You Say That Bicycle Went?

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Imagine a 20-foot wide mud patch through which a bicycle has just passed, with its front and rear tires leaving tracks as illustrated in FIGURE 1. In which direction was the bicyclist traveling?

porotog

Figure 1 Which way did the bicycle go?

You may recognize this problem from the title of the book Which Way Did the Bicycle Go? [8]. For most pairs of tire tracks, you can determine which direction the bicycle was traveling. However, there are exceptions. For example, it is impossible to determine which direction a bicycle was traveling given a single straight track or a pair of tire tracks in the form of concentric circles.

In this paper, we provide a method for constructing such *ambiguous tire tracks*, where one cannot determine from the shape of the tracks which direction the bicycle was traveling. The pair of tracks in FIGURE 1 is in fact an example of such a pair of ambiguous tracks. Our method to produce these involves only a slight variation of the solution method for the original problem [8].

Our method for constructing ambiguous tire tracks starts with the construction of a special initial back-tire track segment. From this initial back-tire track segment, we can construct a front-tire track segment (which will be longer) by pushing the bicycle forward in both possible directions of motion along the back-tire track. The next step is to extend the back-tire track by pushing the bicycle backwards along the newly created front-tire track in both possible directions. This physical construction can be continued iteratively until either the front-tire track or the back-tire track develops a singularity. To see a demonstration of this mathematical construction, the interested reader can view animations at the author's website [5].

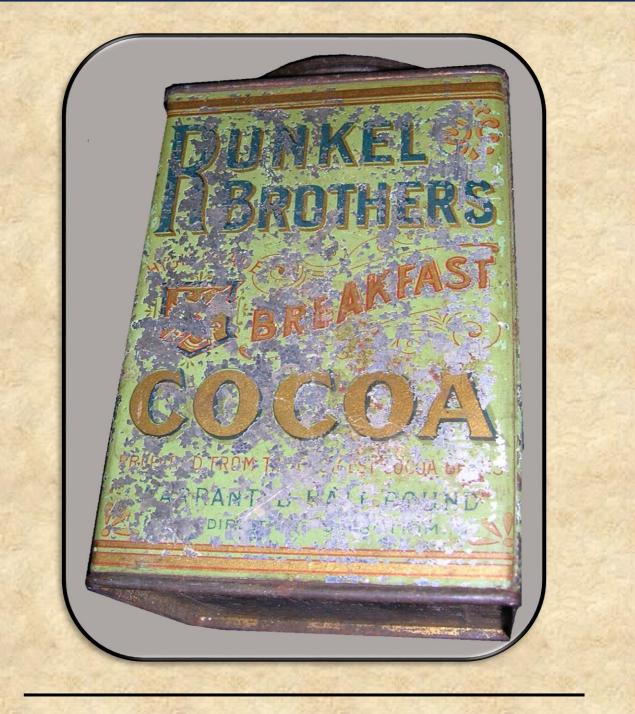
#### A problem with solving the original problem

To determine from its tire tracks which direction a bicycle went, we need to know how the positions of the front and back tires are related. We will assume for simplicity that the bicycle is ridden on a perfectly flat surface and that the plane of the surface in a right angle. These assumptions will be used throughout this paper to simplify the mathematics, as without them we must account for more variables in the problem (the angle at which the bicycle is banked, the shape of the surface on the tire which the bicycle is ridden, the changing point of contact on the tire between the tire and the ground, etc.). The practical impact of these assumptions is that the position of

Pictured is an article in Vol.77, No.5, December, 2004 issue of *Mathematics Magazine*, "Which Way Did You Say That Bicycle Went?" The article discusses Holmes' ability to determine which direction a bicycle was headed based on tire tracks.

### From the story:

'This track, as you perceive, was made by a rider who was going from the direction of the school.'



Pictured is a tin of Runkel Brothers Breakfast Cocoa. Holmes directed Watson to have some cocoa in the next room prior to their early morning reconnaissance.

## From the story:

'I have done the lawn and the bicycle shed,' said he. 'I have also had a ramble through the Ragged Shaw. Now, Watson, there is cocoa ready in the next room. I must beg you to hurry, for we have a great day before us.'



Pictured is an advertising for Palmer tyres showing the longitudinal tread. Holmes knew that Heidegger's tyres were Palmers, and recognized them by their longitudinal stripes.

From the story: 'Heidegger's tyres were Palmers, leaving longitudinal stripes.'

Pictured are two cigarettes Watson while Holmes set on a rock contemplating the case evidence. Bradley's is Watson's favored brand, as is mentioned in *The Hound of the Baskervilles*.

Bradievis

## From the story:

From this wood the cycle must have emerged. Holmes sat down on a boulder and rested his chin in his hands. I had smoked two cigarettes before he moved.

Pictured is the mangled spectacles, with one lens broken out, that were found with Heidegger's body.

## From the story:

We ran round, and there lay the unfortunate rider. He was a tall man, full bearded, with spectacles, one glass of which had been knocked out.

idealed is deed Hey table

Pictured is the note Holmes wrote to Dr Huxtable on notepaper concerning Heidegger's death. Holmes gave the note to a young peat cutter.

## From the story:

I brought the peasant across, and Holmes dispatched the frightened man with a note to Dr Huxtable.



Pictured are Robin Hood and Sunbeam brand bicycle badges, which may have been the brand of bike Heidegger or Wilder used.

From the story:

Out of them we dragged a bicycle, Palmer-tyred, one pedal bent... The other is the bicycle with the patched Dunlop.



Pictured is an advertisement for school clothing from the Illustrated London News. Samuel Brothers, Ltd, show school outfits of the type which Lord Saltire would have had at the Priory School.

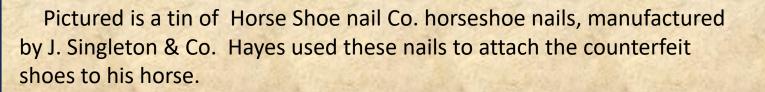
## From the story:

'Well, now, let us turn to this unfortunate German master. The boy was fully dressed when he fled. Therefore he foresaw what he would do.'

Pictured is Reuben Hayes' oily clay pipe, which he was smoking when Holmes faked his injury outside his Inn.

### From the story:

He had had one of those violent strains of the ankle which leave a man helpless. With difficulty he limped up to the door, where a squat, dark, elderly man was smoking a black clay pipe.

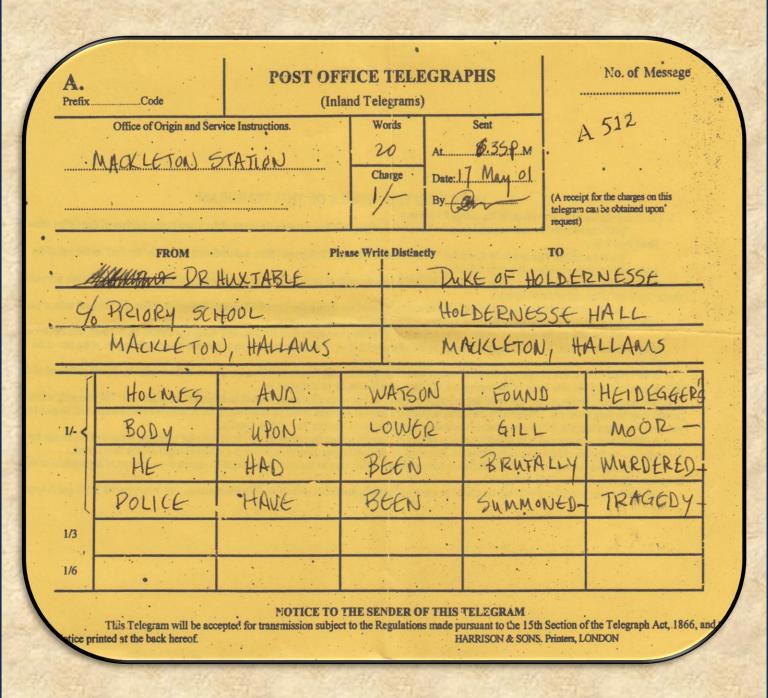


ORSES

8

### From the story:

There were two rough-haired, unkempt horses in the tumble-down stable. Holmes raised the hind leg of one of them and laughed loud. 'Old shoes, but newly shod - old shoes, but new nails.'



Pictured is the telegram sent by Dr. Huxtable to the Duke concerning the discovery of Heidegger's body, murdered.

## From the story:

'We received a telegram from Dr Huxtable yesterday afternoon, which told us of your discovery.'

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Pictured is the telegram sent by Dr. Huxtable to the Duke concerning Holmes' agreement to investigate the disappearance of Lord Saltire.

This Telegram will be accepted for transmission subject to the Regulations made pursuant to the 15th Section of the Telegraph Act, 1866, and

HARRISON & SONS. Printers, LONDON

From the story:

e printed at the back hereof.

'You have come to see his Grace? I am sorry; but the fact is that the Duke is far from well. He has been very much upset by the tragic news. We received a telegram from Dr Huxtable yesterday afternoon, which told us of your discovery.'

Mr. Cherlock Holmes, Esq.	
	The Capital and Estab <sup>4</sup> In % Counties Bank, Limited. 1834. OXFORD STREET. with
	D. Mr. Oherlock Holmes, Esq. C.

Pictured is the passbook cover and ledger for Holmes' cheque book of the Capital and Counties Bank, Oxford Street Branch.

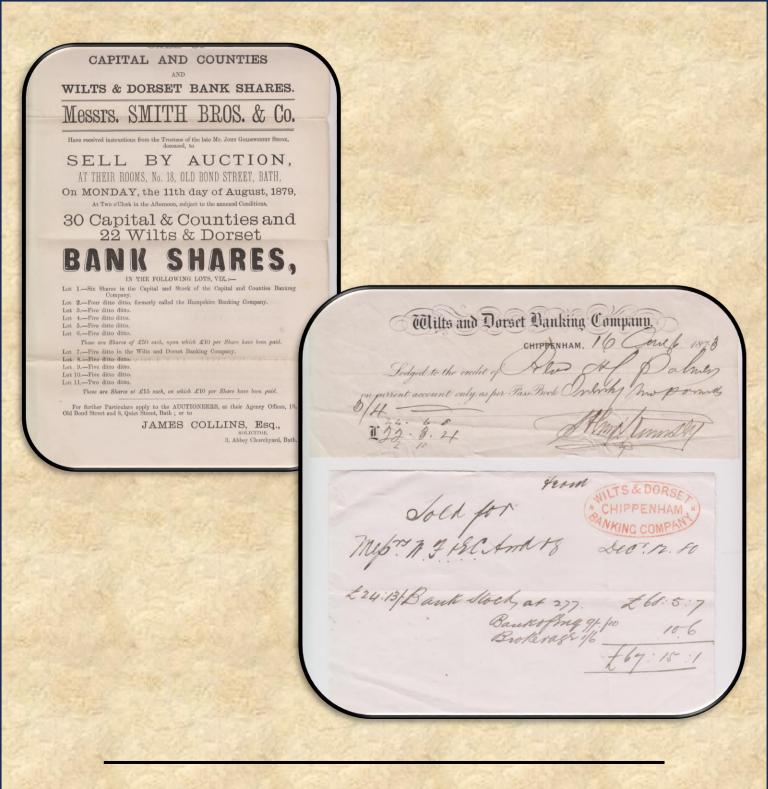
## From the story:

'The Capital and Counties Bank, Oxford Street branch, are my agents.'



Pictured is a cheque from Holmes' cheque book of the Capital and Counties Bank, Oxford Street Branch.

From the story: 'The Capital and Counties Bank, Oxford Street branch, are my agents.'



Pictured are shares of Capital and Counties Bank, the bank Sherlock Holmes does business with.

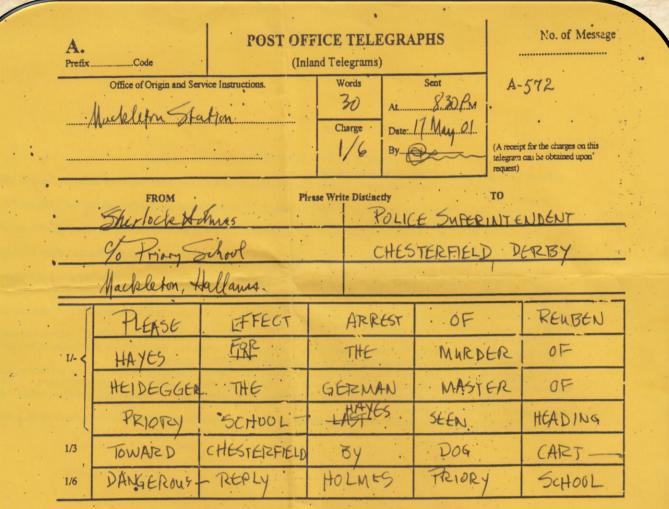
From the story: 'The Capital and Counties Bank, Oxford Street branch, are my agents.'

TELEGRAPHS. POST OFFICE Office Stamp. is sorring to the maximum for the formation of an Inland Telegram doubts its accuracy, he may have it repeated on payment of half the regime of the transmission, any fraction of 1d. less than  $\frac{1}{2}d$ , being reckoned as  $\frac{1}{2}d$ ; and if it be found that there was a racy, the amount paid for repetition will be refunded. Special conditions are applicable to the repetition of Foreign Telegrams. d. Charges 27844 to pay Received led Chestor field Blice Station 910 Aur. 9.05 Am., at here at Of Sherlock Holmes, Yo Priory School, Mackleton, Hallams. Mr Renben Hayes arrested in Chesterfield at 11 oldrake last night on your information upon a charge of the wilful murder of Herr Heidegger. Many thanks from the entire force for your assistance. Garson, Sup t. R.B .- This Form must accompany any inquiry made respecting this Telegram.

Pictured is the telegram from Chesterfield Police Superintendent to Holmes announcing the arrest of Hayes

#### From the story:

'Mr Reuben Hayes was arrested at Chesterfield on my information at eleven o'clock last night. I had a telegram from the head of the local police before I left the school this morning.'



MOTICE TO THE SENDER OF THIS TELEGRAM

This Telegram will be accepted for transmission subject to the Regulations made pursuant to the 15th Section of the Telegraph Act, 1866, and to the Notice printed at the back hereof. HARRISON & SONS. Printers, LONDON

Pictured is Holmes' telegram to Chesterfield Police Superintendent requesting the arrest of Reuben Hayes based on information provided by Holmes.

#### From the story:

'Mr Reuben Hayes was arrested at Chesterfield on my information at eleven o'clock last night.'

Tell no one do not want you ther to stop y now do we Tames Wilder

Pictured is the note which enticed Lord Saltire, Arthur, to leave his room at night. Saltire was directed to the Ragged Shaw. The note was an in envelope with the Duke of Holdernesse's coat-of-arm.

### From the story:

'When James determined to kidnap Lord Saltire it was of this man's service that he availed himself. You remember that I wrote to Arthur upon that last day. Well, James opened the letter and inserted a note asking Arthur to meet him in a little wood called the Ragged Shaw which is near to the school.'



Pictured is torn cabinet photograph of the Duke of Holdernesse, which was probably defaced by his estranged son, James Wilder.

#### From the story:

'I answer that there was a great deal which was unreasoning and fanatical in the hatred which he bore my heir. In his view he himself should have been heir of all my estates, and he deeply resented those social laws which made it impossible.' These shoes were dug up in the moat of Holdernesse Hall. They are for the use of horses; but they are shaped below with a cloven foot of iron, so as to throw pursuers off the track. They are supposed to have belonged to some of the marauding Barons of Holdernesse in the Middle Ages.

Pictured is the descriptive card in the Duke's museum, where the Horseshoe/cloven foot device was on display.

From the story:

The Duke stood in thought for a moment, with a look of intense surprise on his face. Then he opened a door and showed us into a large room furnished as a museum. He led the way to a glass case in a corner, and pointed to the inscription.



Pictured at the Duke's 'museum' is a horseshoe Hayes had shod his horses with -- shoes which counterfeited the tracks of cows.

## From the story:

'These shoes', it ran, 'were dug up in the moat of Holdernesse Hall. They are for the use of horses; but they are shaped below with a cloven foot of iron, so as to throw pursuers off the track.'

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Pictured is the Messrs. Coutts & Comp'y cheque to Sherlock Holmes in the amount of £12,000, crossed Capital & Counties Bank, Ltd, Oxford Street Branch, and signed by the Duke of Holdernesse.

#### From the story:

Holmes folded up his cheque, and placed it carefully in his note-book. 'I am a poor man,' said he, as he patted it affectionately, and thrust it into the depths of his inner pocket. Additional items of interest in "The Adventure of the Priory School" not included in the original Evidence Box.



Pictured is the flask Watson used to administer brandy to Dr. Huxtable when he entered Baker Street.

## From the story:

Then Holmes hurried with a cushion for his head, and I with brandy for his lips.

Dochton of Horton in the county of york worstoo Toochton of Horton in the county of york worstoo Toochoon - and toulliam look of the same place worstoo + Tosavon are had and firmly bound to Honry Drillioto of the gety of york Coalmonchant in the sum of Righty oight of good and lawfull Wonty of Gztat Britain to BE paid to the of Jood and lawfull Monty of Getat Britain to be paid to the sand Honey Berlin Cittoenty Extrustorochoministicatoro or a bigno for which Dayment to be well and faithfully made as bind . There can be ached as by here is the tote of an o in Direction of the State of the tote of and the tote of an o in Direction of the State of the the tote of an o in Direction of the State of the the tote of an o in Direction of the State of the the tote of an o in Direction of the State of the the tote of an of the Direction of the State of the the tote of an of the Direction of the State of the the tote of an of the Direction of the State of the the tote of an of the State of Be Sound to this Obligation is out that if the above bound in Sugar Desighton and William Cook of Swith & them Bowe Extrutozo aninificato zo ca figue do to thand truty Office pictor fullill attomption pay and ktep alland singular the tovenants grants and chilites though provisots payments consinous and agritements what so tots so which on the part and that of the said of the said of the soil the soi Extrutorodoministratorsor Asigns art or ought to be obstroted performed fullfilled attomptished paid and kept tomprifed or mentioned in a cost farm Indentione of Alloade of three parts a cortain Indontias of Rolans of three parts Bearing date with these parts into anomale or three parts Between the said Scifficen losk by the name and a Dilion Schween the said Storten in the county of Up & londod barres (all, so and for Storten in the county of Up & londod barres Becased of the first part the said Incept Despite of the second part and the said Storry Dripted of the thord part in all things attowing to the haut intent and intening of the same Chien this present Obligation to be void and of none effect or effeto be and remain in full forte poroter and vertue ealed and othiotitd Joseph Dighton in the prefent of Mar Marrison Shipton The Lund William Cook

Pictured is a page from the Ferrers documents, which he mentioned to Dr. Huxtable he currently investigating.

#### From the story:

'I am retained in this case of the Ferrers Documents, and the Abergavenny murder is coming up for trial.'



Pictured is the ivy which Heidegger used to scale down the wall beneath his window when pursuing Lord Saltire.

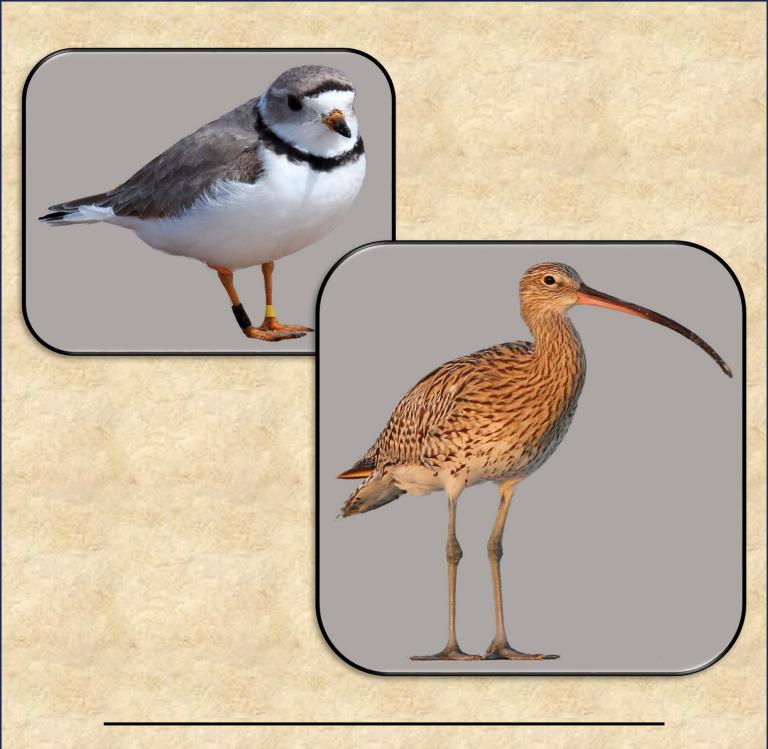
## From the story:

'He had undoubtedly let himself down by the ivy, for we could see the marks of his feet where he had landed on the lawn.'

Pictured is the amber-stemmed pipe Holmes used while at the Priory School.

From the story:

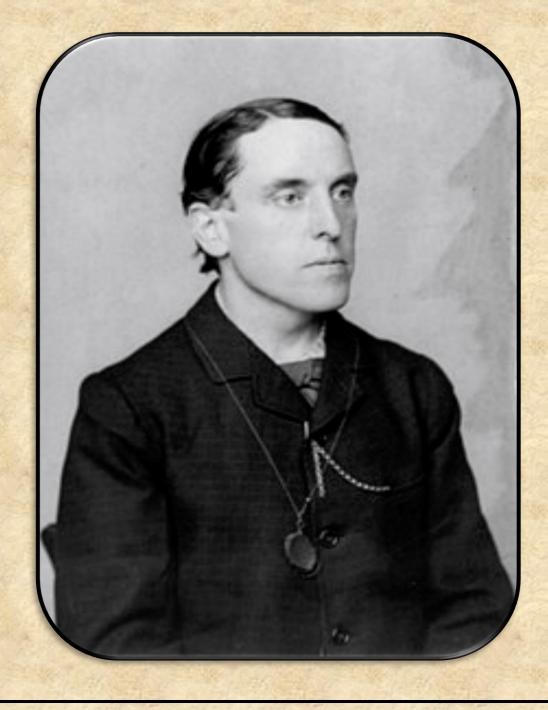
...he began to smoke over it, and occasionally to point out objects of interest with the reeking amber of his pipe.



Pictured is a plover and curlew, the only animals Holmes says you would encounter on the moor, except for a few cattle.

# From the story:

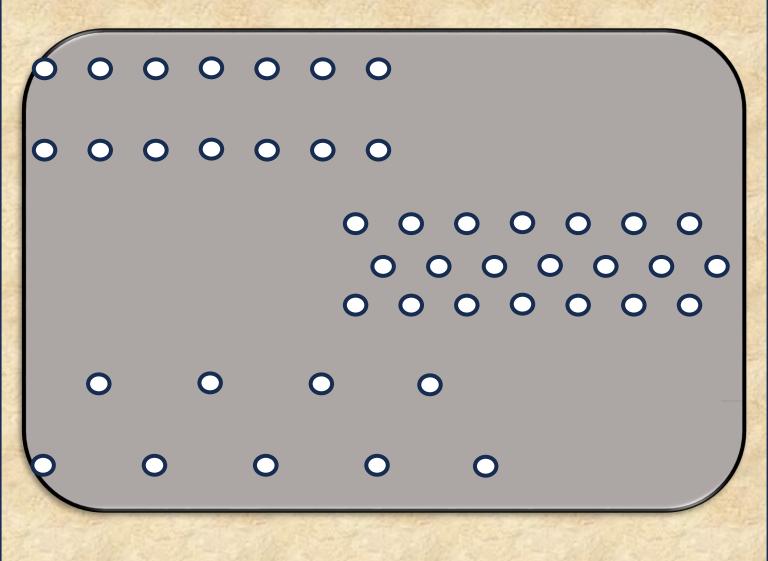
'Except these, the plover and the curlew are the only inhabitants until you come to the Chesterfield high road.'



Pictured is a photo of Edward Aveling, a noted mathematician and professor, who was teaching mathematics at the school for the summer.

### From the story:

'Heidegger's tyres were Palmers, leaving longitudinal stripes. Aveling, the mathematical master, was sure upon the point. Therefore, it is not Heidegger's track.'



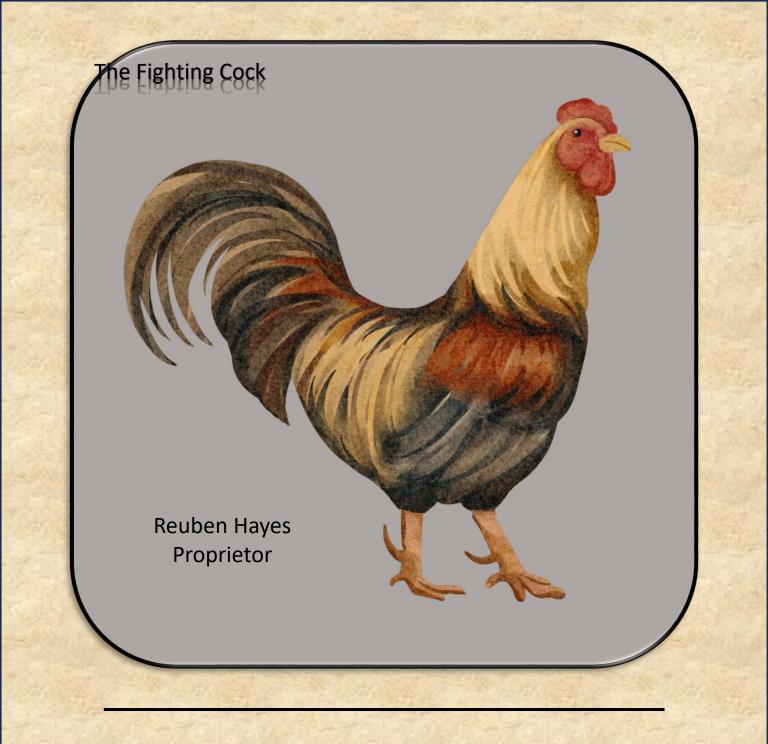
Pictured is the arrangement Holmes made of the different cow hoof tracks they had encountered on the moor with bread crumbs on the table.

From the story:

'Now, Watson, make an effort; throw your mind back! Can you see those tracks upon the path?'

'Yes, I can.'

'Can you recall that the tracks were sometimes like that, Watson - he arranged a number of breadcrumbs in this fashion.'



Pictured is the sign hanging outside the inn which Holmes and Watson encountered on the moor.

### From the story:

'There are the horses, there is the smithy. Yes, it is an interesting place, this 'Fighting Cock'. I think we shall have another look at it in an unobtrusive way.'