SCOTLAND
MUSEUM OF TRANSPORT
KELVIN HALL
GLASGOW

MUSEUM OF TRANSPORT, GLASGOW
GLASGOW DISTRICT COUNCIL

1st INTERNATIONAL CONFERENCE OF CYCLING HISTORY 1990
1ere CONFERENCE INTERNATIONAL SUR L'HISTOIRE DU CYCLE 1990

30th – 31st May 1990
GLASGOW
Scotland / Ecosse

Kirkpatrick Macmillan, The Inventor Of The Pedal Cycle Or The Invention Of Cycle History?

NICHOLAS ODDY

"K.M.150-INTERNATIONAL FESTIVAL OF CYCLING AND CYCLE HISTORY-INCORPORATING THE 10TH INTERNATIONAL VETERAN CYCLE RALLY -TO CELEBRATE THE INVENTION OF THE PEDAL BICYCLE c150 YEARS AGO BY KIRKPATRICK MACMILLAN"

What more fitting time could be had to hold the first International Conference of Cycling History than to coincide with the celebration of this anniversary, and what more crucial subject could be discussed than this seemingly seminal invention? The basis of both festival and conference seem obvious therefore, and a paper on Macmillan a certainty. But what can we hope to learn about Macmillan and his invention, when scant real evidence of them exists and even the spelling of his name is in doubt? Perhaps the time has come to consider Macmillan not in terms of the man or the invention, but in terms of the way in which he has been incorporated into history.

Most of us know something of Macmillan. I remember being told about him at school at about the age of ten - the story of the Scottish country blacksmith at Courthill Smithy who, in about 1840, put pedals on a hobby horse, rode to Glasgow and was the inventor of the bicycle as we know it; is probably part of the history lesson in many Scottish schools, and is certainly familiar, in more or less romanticised form, to most cycle enthusiasts and other interested parties today. 'Romanticism' is the key word applying to Macmillan; even in the bare-bones story I received at school it seeped out of words such as 'blacksmith' and 'country', giving the whole story an air of agrarian pre-industrial craft, honest toil and inventive success, to produce something which was an important step towards the modern world. Even better, the man was British and better still (in a Scottish school) a Scot; therefore the story has a strong nationalistic element which can be brought into play.

With such a rich collection of ingredients, the story is not only the preserve of primary and prep schools, it also appears in other, written, histories, mainly in the form of the bare-bones version outlined, but some more inventive writers have undertaken longer studies which, because of the dearth of factual information, have to draw heavily on the writer's imagination. No better example of this is the book 'The Devil on Wheels' by J Gordon Irving which is rich in imaginative composition, down to the inclusion of supposed spoken word. (1)

Such history is not only the product of romantic and nationalistic imaginings, it is also the result of there being very little verifiable history available about Macmillan, thus his mythical history can develop unopposed. Most of the supposed factual history was researched in the very late 19th century by James Johnston - fifty years after the event - and only in order to prove that Macmillan had invented a pedal-driven bicycle before other contenders for the title, in particular Gavin Dalzell. Most of Johnston's evidence was hearsay and neither the machine, drawings of the machine, contemporary written evidence or definite date of manufacture could be found. Once Johnston's single-minded pursuit of his goal of proving Macmillan's claim had been achieved (and, probably more importantly, Dalzell's discredited) it seems that he was content to let go of the subject. For all one knows Johnston may have come across much more evidence, but this has been lost. As it stands, Johnston's evidence is convincing by its sheer weight alone and gives us no truly factual evidence beyond vagaries of reminiscence over half a century old. (2)

So, what can we actually establish about Macmillan and his bicycle if most of the evidence is so loose. The **only** contemporary piece of evidence and really the backbone of the entire story is the famous paragraph in the *Glasgow Herald* of 10 June 1842 which fails to mention Macmillan's name even. (3)

***"The Velocipede** - On Wednesday a gentleman, who stated that he came from Thornhill, in Dumfriesshire, **was** placed at the Gorbals police bar, charged with riding along the pavement on a velocipede, to the obstruction of the passage, and having, by so doing, thrown over a child. It appeared, from his statement, that he had, on the day previous, come all the way from Old Cumnock, a distance of forty miles, bestriding the velocipede, and that he had performed the journey in the space of five hours. On reaching the Barony of Gorbals, he had gone upon the pavement, and was soon surrounded by a large crowd, attracted by-the novelty of the machine. The child who was thrown down had not sustained any injury; and, under the circumstances, the offender was fined only in 5s. The velocipede employed in this instance was very ingeniously constructed - it moved on wheels turned with the hand, by means of a crank; but to make it "progress" appeared to require more labour than will be compensated for by the increase of speed. This invention will not supersede the railways."*

On this paragraph the entire Macmillan story rests. How believable it is in detail is a matter of conjecture. Journalists in 1842 were no different to those of today, even the records of the Gorbals Police Bar (one of the Glasgow Police Courts) have been lost, and the account of the machine's driving mechanism has been a bone of contention in cycling circles for years. However, the article does make it clear that the machine did have an unusual driving mechanism, while a sustained speed of eight miles per hour for five hours suggests that the mechanism was quite effective, more likely to be leg than arm powered - though who can tell, the date, mid 1842, was well after the machine was supposed to have been made and there is nothing to say that Macmillan did not

experiment with other driving mechanisms than pedals, or indeed did not build more than one machine.

That pedal operation is denied by the only actual contemporary evidence is a problem, though luckily for the foot-pedal argument Johnston's evidence manages to produce enough reminiscences which included this feature to make it convincing. (See letters and citings from R Hamilton, T Haining, Mrs Waters, Elizabeth Fingland, et al, quoted by Johnston in *'Bicycling News'* through February, March and April 1892), while, of course, Dalzell's machine, which Johnston was keen to prove a direct copy of MacMillan's, was also foot driven.

We can only be certain, therefore, that by 11 June 1842 an individual likely to be Kirkpatrick Macmillan (4) had in his possession a mechanically driven velocipede (5) and that he rode it in the Gorbals at about this time. Furthermore, it is likely that he rode the machine from Cumnock to the Gorbals on one day - but even this ride cannot be verified.

Beyond this we can add other ingredients. We know that Macmillan was a blacksmith by trade, and that in the early 1840s his father's business included Courthill Smithy. Actually we can prove little more than this, though reminiscences and fabrication have made us believe that we actually do know more. It is this latter, more imaginative history which I, for one, feel is more important to us here and is the real subject of this paper.

This history owes its foundation in the first place to 'prolix jingoism' as Nick Clayton (6) puts it; it has also been tempered by the interests of collectors, and a reliance on a 'names and dates' historical methodology, similar to that junior-school history in which I first learned about Macmillan. In addition to this, over the last few decades, at least, it has been encouraged by popular conceptions of early bicycles and their riders. It is this 'history' which has kept MacMillan from being a forgotten and unimportant curiosity; to some this may be laudable, to others (and hopefully most of the delegates here) quite the reverse.

Ever since Johnston's research in the 1890s, those people writing about Macmillan have often done so with ulterior motives. Johnston, as a distant relative of Macmillan, was keen to uphold family honour along with local and national pride, the latter expressed in the concluding paragraph of the 'Invention of the Bicycle' .

"In conclusion, it may be asked what particular object or interest I have had in gathering information about Macmillan. Well, that is easily answered. For love of the sport, and as an old cyclist, I was anxious the pride that to my native county of Dumfries belongs the honour of being the birthplace of the clever genius who produced the missing link in the history of the evolution of the cycle, between that of the "dandy-horse" (which the rider propelled by his feet on the road) and the "bone-shaker" Of the 'sixties, driven by the front wheel. The French nation, some years ago, put up a statue to Michaux, as the inventor of the latter machine, not knowing that such a man as Macmillan had ever lived. - Yours truly,

JAS.JOHNSTON,

Glasgow Cycling Club. (7)"

Nationalism has continued to be a recurring element in writing on MacMillan. The Scottishness of the man has been very important to Scottish writers such as Gordon Irving; for instance in the conclusion to 'He Builded Better Than He Knew' in the *'Gallovidian Annual'* of 1940.

"So died a man of whom the world has yet to learn of when Scotland and Dumfriesshire may well be proud - A typical country blacksmith of last century, his invention has brought health and happiness to countless millions of people in every quarter of the World". (8)

With contenders to the title of inventor of the pedal bicycle being at the time of J B Dalzell and Johnston, people such as Michaux; (and in more recent times, Alexandre Lefebvre) neither of whom were British, Macmillan's importance as a national hero takes on more than mere 'Scottishness' had all other comers been British. This gives a double layer of nationalistic input.

Gordon Irving's article can be used again for the romantic element of the Macmillan tale.

COURTHILL SMITHY TO-DAY

"Courthill smithy still stands in the parish of Keir, and inside the now disused building remains of hearths and the old bellows are still to be seen. But, as in many another smithy in Scotland, its former glory is gone, or it is but one of the many smithies that have lately closed down throughout the land.

There are now in Dumfriesshire only 59 smithies still in use, and farmers have often to go many miles to have a horse shod or a repair made.

In truth, they must often yearn for the good old days of last century when motor cars and the like were unknown, when folk lived a slower and perhaps a saner life, when only the harmless velocipede was in use, and when "Pate" Macmillan, blacksmith, fiddler, dentist, and vet, was always at hand in the little Courthill smithy where, approximately one hundred years ago, he built the world's first pedal-propelled bicycle. (9)"

These paragraphs adequately sum up the romantic input of the story. The image conjured up appeals to the concept of rural life so beloved by the British. To the Scots, a nationality whose huge industrial history always seems to be an embarrassment, and who like to think of themselves (as the English and Americans do) as kilted highlanders leaping over a Walter Scott style pre-industrial rugged countryside, the image is appealing, and underlies much of the writing on Macmillan. However, in the same ways as Trevor Roper has shown us the suspect nature of the image of the tartan kilted Scotsman in *'The Invention of Tradition'* (10), so the accepted contextual history surrounding Macmillan can be doubted.

Recent work by Alistair Dodds (11) at the Royal Museum of Scotland, has turned up some interesting insights into Macmillan. The popularly accepted context of Macmillan's invention is that as the smith in the tiny Courthill Smithy he assembled his machine in about 1840. In 1842 he undertook his run to Glasgow to visit his brother - whereupon he was

arrested with the consequent appearance of the paragraph in the *Glasgow Herald.* The image is of the honest country blacksmith Macmillan setting out on a unprecedented epic run to a large and entirely alien urban environment. Mr Dodds' research shows something rather different. Once again, we are faced with the suspect nature of the 50 years' distant recollections of Johnston's witnesses. If Macmillan was in Dumfriesshire in 1840, then he could have been at any one of three smithies of which Courthill is possibly the least likely, for it seems that before taking on his father's business at Courthill (probably late in the 1840s) Macmillan was employed by the Duke of Buccleugh at Drumlanrig and Mallowford Smithies. More intriguing, is the fact that in the 1841 census (12) MacMillan gives his place of residence as with his brother in Shamrock Street (part of new City Road) in Glasgow, while at the time he was employed by the Vulcan Foundry. As this is the only real evidence so far to emerge which gives any clue as to where Macmillan actually lived in the early 1840s, there is every chance that in 1840 and/or 1842 Macmillan was also in Glasgow and that he was on a **return journey** the the time of the Gorbals incident, and that the epic run may well have been one after many others. With the minimal evidence available, there is also a good chance that much of the machine was constructed in Glasgow, and who can say if others (or variations, such as hand-operated versions) were turned out, or not?

The 1841 Census is a piece of factual evidence which removes any romantic conception of the 'Village Blacksmith' kind - one also has to remember that MacMillan's brother (and housemate in Glasgow) was Master of Classics at Glasgow Academy - hardly the average company for the dependable rustic, who the story tends to depict.

It seems, then, that the whole Macmillan story is more conjecture than fact. There is no real evidence either of context or of the actual invention, save for one or two tiny and ambiguous components which tend more to contradict the popular construction of the Macmillan story in the period 1835-45, than support it. We can see, perhaps, how romantic and nationalistic elements can keep the story alive in the area of popular history of a type represented by the work of Gordon Irving. But why are we sitting here discussing the matter? Or indeed why is John Pinkerton concerned with organising a week-long festival in commemoration of an event which may not have even taken place where it is supposed to, and certainly cannot be pinned down to any date? For this we have to look closer to home, to the way in which cycling history is going and to what the treatment of MacMillan's history might tell us about our own approach.

There is no doubt that the Macmillan story is interesting. It has a good number of credentials which make it very tempting, particularly to collectors and to others who believe in a 'great names' approach to history - in which heroes and classic objects punctuate the development of all things. (13) For a start, Macmillan is early - he is the first. Macmillan's place in the league table of 'firsts' is enhanced both by the dearth of actual factual material and his relative obscurity, and yet also by the fact that, in spite of this, Macmillan is a nice clear subject. Although there may be little concrete factual evidence about him or his machine, we do know quite a lot about him. He is an individual and he only seems to have produced an individual bicycle. We know a lot about the man and the machine through circumstantial evidence, and a single individual known to be in a certain part of the a small country at a specific time, is a very tight and easy subject to deal with. (Compare trying to do research into Macmillan, to an obscure manufacturer in the late 19th Century, where all one might have is some part of a machine with a few cryptic initials such as R.B. & Co).

Perhaps, as a result, it is the aim of many merely to reveal some crucial factual evidence, by so doing enhance Macmillan's position in national history, and (by the way) their own amongst their peers. The present paucity of factual evidence and the obscurity of the subject, means that, in comparison to others inventors of great machines, Macmillan offers a rich vein of brand-new material. Even something as obvious as the 1841 Census seems only recently to have been properly consulted, and is able to throw the accepted history into confusion - so brownie points for new research are obviously easily had.

The Macmillan story is enhanced further by the fact that Macmillan's invention is known to have been built, and it is of a size and type which make possession a realistic possibility. This invests the whole story, to collector-historians at least, with a sort of Holy Grail quality - possibly **it** could be found! The fact that if Macmillan's machine still exists it is likely to be in Britain is even more attractive to British enthusiasts. Surely the ultimate 'find' for the veteran-cycle buff is conclusive evidence of 'The Machine'. Even a contemporary drawing would earn massive kudos for its finder, the machine itself, or bits of it at least, would elevate their finder (and hopefully owner) still higher. It is the possibility of such a find which perhaps encourages many to plumb the depths of the Macmillan story.

It is perhaps pertinent to note here, that as there is no conclusive evidence of the machine's destruction (14), it can only exist - rather like the object illustrated in a catalogue yet seemingly never made, one can only find it!

Thus we have the ideal subject for the amateur historian. A story steeped in nationalistic and romantic content, a clear foundation of knowledge on the subject to aid research. A great invention, a single named inventor, and a reasonable possibility of uncovering important evidence which would greatly elevate the position of the finder amongst his peers. In general, emphasis is placed on Macmillan and his machine over broader historical issues; and the way in which the former are being glorified and popularised can be used to illustrate problems which I feel are crucial to address at this first conference of cycling history. For we have, represented here, the beginnings of an academic minefield which is already well established in other areas of the history of design, where there is constant friction between art-historical great names, seminal objects and dates, collectors rivet-counting object analysis and appreciation and popular history - while cultural history is a poor relation to all.

Macmillan is, in the first instance, representative of a type of theme-park style popular history of the type heavily criticised by people such as Robert Hewison in his book *'The Heritage Industry'* (15), in which small amounts of fact are

bolstered by large amounts of imaginative composition to give the viewer a comfortable image of the past; this sort of history is further enriched by dubious re-creations of historical context. What more comfortable image of the past can exist than the picture of the early Victorian village blacksmith creaking along the cart-tracks deep in the countryside on his quaint contraption? What a chuckle to find him later in a pickle over a charmingly harmless incident on his rare visit to town.

We need not look far to see this sort of 'history' in the making. During the week in which this conference takes place a bicycle museum will open at Drumlanrig in which there is intended to be a re-created 19th century forge (an ironically appropriate word!) which might be somewhat similar to that used by Macmillan, along with a re-created pre-war 'shop setting'; while a group of enthusiasts will be pedalling their 'reproductions' of a machine which has never been seen, along a route entitled 'Macmillan's Return' which cannot be authenticated in any way whatsoever, on the supposed 150th anniversary of an event which we cannot date within a year! We should not need to dwell too much on the historical value of this charade, suffice to say that the attitude summed up by the title of an article in *The Scotsman* of 11 May on the, then forthcoming, KM 150 'Eccentric ready to pedal his hero into history' will no doubt be greatly strengthened.

If this is not enough to put any serious academic off the subject, then the problems raised by other aspects of the current treatment of Macmillan's history may well do. For the Macmillan phenomenon can be seen to illustrate two other historical quagmires, more difficult to avoid than the theme-park approach which can usually be written off as 'Mickey Mouse'.The first of these is the great name. The heroic figure in the industrial history of Britain has been popular since the writing of Samuel Smiles (13), and Macmillan is no exception to the rule. The problems are inherent in the assumptions which the heroic history presupposes. Few people are willing to swallow the somewhat guarded assessments made by people such as Nick Clayton. (16)

"What can be established is that Dumfries machines did not compete successfully with the French bicycle of 1869 and that in the principle of indirect drive to the rear wheel there is no direct line of descent to the safety bicycle of 1884.

The name of Kirkpatrick Macmillan should surely be listed alongside those of Gompertz, Shearing and Shergold. But with von Drais, Michaux and the Starleys, never."

Most perceive history, particularly of objects, as a kind of Darwinian evolution. Even the statement 'inventor of **the** first pedal cycle' presumes that something follows in logical progression. As we all know here, Macmillan's machine led to a few copies and little more, it did not play a part in the evolution of the pedal cycle as most would understand it. It would be better if the organisers of events such as **KM 150**, and indeed ourselves, thought in terms of 'Macmillan, the inventor of **a** pedal bicycle'; not so impressive perhaps, but more accurate in terms of overall history.

The great name is a further obstacle in the way of a more reasoned history in its very greatness; people are tempted to pay it undue attention. Macmillan is a good example, a curiosity who seems to take up inordinate amounts of historians' time. This gets back to the fact that great names are often easy to tackle in terms of research, but notice how much time is spent trying to prove trivialities such as **when** was the machine made, what were the exact details of its mechanism, and so on. Surely more important would be some solid research into the **actual context** of Macmillan and his later copyists, in order to ascertain why the Macmillan type machine did not become more widespread, or indeed the type-form machine, rather than the front driver of Michaux? Forget Macmillan the man or the invention, consider social context, retail outlets, fashion and manners - these will give us a far more accurate impression of Macmillan's machine in terms of its historical worth. Unfortunately this area is far more difficult to deal with than the man himself or his invention, and is certainly outwith the scope of many collector-historians who think in terms of objects, rather than the cultures the objects belong to.

This raises the second of the two historical quagmires - the collector's approach to history. As a design historian and also a collector I am acutely aware of the problems which many cultural historians have in dealing with the object-orientated research of collectors. And here, already, cycle history is well dug-in.

Although the bicycle is an important factor in late 19th century social, economic and industrial/manufacturing history, there is little contact between the bulk of cycle historians (who are mainly collectors) and more 'academically based' historians. The reason is clear; the collector's primary interest is possession of the objects which are, for some reason, unusual or interesting and likely to be the envy of his peers; the academic does not have any of this avarice for the objects themselves, and is therefore not involved in the collector's primary occupation, dealing with and handling the objects and defining which are the rare (and preferably desirable) ones. As most of the books dealing with the actual objects are written by collectors, one finds that cycle-history is weighted towards the rare and curious as these are the most likely to be what collectors want to own, it comes as no surprise to find, therefore, that when called to provide object based information, the academic often makes some interesting choices through having to rely on these somewhat lop-sided surveys of manufactured goods.

An example is the book *An Introduction to Design and Culture in the 20th Century* by Penny Sparke (17)(which has become a standard work of reference for undergraduate design history students) in which she illustrates

'The form of the bicycle has survived, for the most part, the vagaries of fashionability and styling. Three main factors - lightness, stability and comfort - dictate its visual form and once these elements had been combined in the 1890s the problem was as good as solved' with a figure showing 'Dursley Pedersen Bicycles'.

Here we see a major problem which is also reflected in the interest in Macmillan. Macmillan is, in overall terms, unimportant to a cultural historian dealing with cycling history; but the unusualness of the machine, its interesting provenance and early date, make it supremely interesting to the collector. In *Design and Culture* a pair of nameless roadsters would more reflect the standard bicycle of the turn

of the century, but unfortunately these do not interest the collector as much as objects such as Dursley Pedersens; thus, in historical terms, undue weight is given to very expensive low-production models, or mechanical and structural oddities which sold in small numbers and/or were destroyed in large quantities.The Macmillan machine fits in here.

The only history that the collector does provide which can be easily read by other types of researcher is the blow-by-blow definitive account, where every variation of a particular product is described and listed in chronological order. But how much of this is needed in terms of broader history?

The conclusions we can draw from all this are quite plain. It is crucial that if cycling history is to develop into a serious academic area of study, then more of its exponents must leave the Macmillans and the Pedersens behind and start looking at much broader historical issues. It is notable in this conference of 'cycling history' three out of the four subject areas concern individual great names and dates, only one deals with a broader subject of more wide-reaching interest than to a few cycle buffs; perhaps we should re-christen the subject cycle history until we begin to look at history rather than the machines?

One thing is certain. While cycle historians continue to fiddle with names and dates, both academic and public conceptions will tend to be set by events such as KM 150, highly publicised travesties of history. Until we remove ourselves from spectacles such as this, cycling history will remain suspended between a 'bells gongs and whistles' public impression of eccentrics on cronky bikes, and erudite articles by specialist collectors on the variations of three-speed gears; with no room for a sounder, broader academic base at all. It is doubtful if further researches into Macmillan the man or the machine will provide us with any more knowledge on the invention of the pedal cycle. It seems that Macmillan is no longer much to do with the history of the 1840s, but rather a telling statement on the cultural history of bicycle connoisseurship today.

As a footnote - so as not to leave any loose ends, and of utmost importance to us all: Macmillan seems to have spelt himself Macmillan - if his signature on his daughter Mary's birth certificate of 1854 is to be believed!

NOTES

(1) See particularly Chapter X (pp 43-47) in which is given an entire transcript of the proceedings of Macmillan's court appearance in Glasgow in 1842. In fact no records of the proceedings of this event has survived.

(2)Most of Johnstone's evidence comprised verbal reminiscences assembled in the late 1880's and early 1890's from 'eye witnesses' who were recalling the 1830's and early 40's. None of his evidence seems to have been contempory with the events.

(3) This paragraph first appears in the *'Glasgow Angus'*, 9June 1842 p2, col4. It subsequently appeared in the *Dumfries and Galloway Courier* 13 June 1842 p3, col1.

(4) Since writing this paper a convincing argument suggesting that the incident might not have involved Macmillan has been put forward by Alistair Dodds in *'he Boneshaker* No. 127, Winter 1991 p12.

(5) What this 'velocipede' was is debatable. There is nothing to say that it was necessarily two-wheeled.

(6) CLAYTON, N 'The First Bicycle' in *The Boneshaker*, No.13, Spring 1987, p28.

(7) JOHNSTON, J. 'The Invention of the Bicycle' in *The Hub*, 4 March 1899, p179. An altered form of the same paragraph concludes Johnston's 'The First Bicycle' in *The Gallovidian*, No. 4, Winter 1899, p151. A similar can be found in 'The First Gear Driven Bicycle, Gavin Dalzell's clain further disputed' in the *Bicycling News*, 13 Feb. 1892, p104.

(8) IRVING, G. 'He Builded Better Than He Knew - The Story of Kirkpatrick MacMillan' in *The Gallovidian Annual*, 1940, p63

(9) Ibid.

(10) TREVOR-ROPER, H. 'The Invention of Tradition: The Highland Tradition of Scotland' in HOBSBAWM, E.J. & RANGER, T. (Eds) 'The Invention of Tradition'

(11) Alister Dodds' research has been published in *The Boneshaker* No 127, Winter 1991, pp11-22: 'What did Kirkpatrick MacMillan Invent'

(12) Held at the Scottish Office at Edinburgh.

(13) Smiles' three volume 'Lives of Engineers' was published in 1862, and its companion 'Industrial Biography' in 1863. In these, Smiles outlined the great achievements of engineering and engineers, his biographies depict individual engineers as heroic figures struggling (often at odds) to push forward civilisation. Much of this reflects the philosophy behind Smiles' earlier work 'Self Help' published in 1859.

(14) It was claimed that the machine was broken up - but this claim (reported by James Johnston in 'The First Bicycle' *Gallovidian*, No. 4 Winter 1899. p149) was based on hearsay and couched in conditionals.

(15) HEWISON, R. 'The Heritage Industry' 1983. See particularly Ch.1 'Living In A Museum', pp 15-32 and Ch. 4, 'The Heritage Industry', pp89-98.

(16) CLAYTON, N. 'The First Bicycle' in *The Boneshaker,* No. 113 Spring 1987, p28

(17) SPARKE, P. 'An Introduction to Design and Culture in thr 20th Century' 1986, pp30-33 'The Bicycle' p31 and Fig. 8, p32.

BIBIOGRAPHY

ALDERSON, Frederick, *Bicycling, A History* David & Charles, Newton Abbot, 1972.

ALTHUSER, John, *Pierre Michaux and His Sons* Translated and revised by ROBERTS, Derek. Orig Edin, 1986; Revised Edn, Jim Willis, Kenilworth, N.D.

J.F.B., *The Velocipede. Its Past, its Present and Its future* Simpkin Marshall & Co, London, 1869.

BARTLEET, H.W., *Bartleet's Bicycle Book* J Burrow & Co, London, 1931.

CAUNTER, C.F., *The History and Development of Cycles as Illustrated by the Collection of Cycles in the Science Museum* (2 sections) HMSO, London, 1955/1958.

CLAYTON, Nick, *Early Cycles* Shire Publications, Aylesbury, 1986. *Cycling History Myths & Queries - Correction Notes* Nick Clayton, Cheshire 1991.

CROWLEY, Terence Eldon, *Discovering Old Bicycles* Shire Publications Ltd, Aylesbury, 1973.

GLASGOW MUSEUM OF TRANSPORT, *Cycles, A Short History* Glasgow Museum of Transport, Glasgow, 1970.

HALLETT, Ray, *Cycling On* National Trust, Over, Cambridge, 1978.

HEWISON, Robert, *The Heritage Industry* Methuen, London, 1987.

HOBSBAWM, E.J. & RANGER, T. (Eds), *The Invention of Tradition* Cambridge Univ. Press, 1983.

IRVING, Gordon, *The Devil on Wheels: The story of the world's first pedal cyclist* Dinwiddie & Co, Dumfries, 1946.

KEPPEL, William Coutts (Viscount Bury/Rt Hon The Earl of Albermarle) & HILLIER, George Lacy, *The Badminton Library of Sports and Pastimes - Cycling* 1st Edn 1887, Partic Chapter II 'Historical' pp53-126, p59. 2nd Edn 1889, Partic Chapter II 'Historical' pp53-126, p59. New Edn 1894, Partic Chapter II 'Historical' pp53-123, p59. New Edn 1985, Partic Chapter II 'Historical' pp53-111, p59. Longman Green & Co, London.

McGURN, James, *On Your Bicycle : An Illustrated History of Cycling* John Murray, London, 1987.

PALMER, Arthur Judson, *Riding High : The Story of the Bicycle* Vision Press, London, 1958.

RITCHIE, Andrew, *'King of the Road : An Illustrated History of Cycling'* Ten Speed Press, Berkeley, 1975.

ROBERTS, Derek, *Cycling History, Myths And Queries* Pinkerton Press, Birmingham, 1991 (see CLAYTON, Nick - Correction notes).

SAYERS, L & LITTLEWOOD, B.R., *A Brief Guide to the History of the Cycle* Museum of British Road Transport, Coventry, 1987.

SMILES, S, *Lives of The Engineers With an account of their principal work* (3 volumes) John Murray, London, 1862. *Industrial Biography* John Murray, London 1863. *Self Help : with Illustrations of Character and Conduct* London, 1859.

SPARKE, Penny, *An Introduction to Design & Culture in the 20th Century* Allen & Unwin, London, 1986.

SPENCER, Charles, *Bicycles & Tricycles Past & Present - A Complete History of the Machines from their Infancy to the Present Time* Griffith & Farran, London, 1882/3.

SUMNER, P, *Early Bicycles* Hugh Evelyn, London, 1968.

WILKINSON LATHAM, Robert, *Cycles in Colour* Blandford Press Ltd, Poole, 1977.

WOODFORDE, John, *The Story of the Bicycle* Routledge and Kegan Paul Ltd, London, 1970.

Periodicals

BIKE (The), Glasgow. No 12, 26 May 1987, P10: *The Invention of the Bicycle* (Article discussing 'RS' claim for Charteris). No 15, 16 June 1987 p7: *The Invention of the Bicycle MacMillan's Claim Groundless* (Letter from Robert Service re above). No 32, 13 October 1987, p11: *An Interesting Extract - the First Scorcher* (Robert Service reports on the Dumfries and Galloway Courier for Mon 13 June 1842).

BICYCLING NEWS, Birmingham. 24 Dec 1880, p781: *The First Bicycle.* 7 Jan 1881, pp10, 11: Correspondence - *The First Bicycle and the Velocipede* (Letter from C Wheaton citing Mr Thos Brown). 26 Jan 1889, p56: *Fact & Opinion - The First Bicycle. 6 April 1889, facing p220: 'Bicycle News Cartoon' - The First Rear Driving Bicycle Invented by Gavin Dalzell*, p248: *The First Rear Driving Safety* (Comment from S James). 20 April 1889, p248: *The First Rear Driving Safety* (The following reaches us from S James Trevlyn). 6 Feb 1892, pp87, 88: *The Origin of the Rear Driven Cycle Gavin Dalzell's claim disputed* (Citing letter from Thomas McCall). 13 Feb 1892, p104: *The First Rear Driven Bicycle Gavin Dalzell's claim further disputed* (Letters from James Johnston and 'Ben Jubal'). 20 Feb 1892, p123: *More about The origin of the Rear Driven Bicycle.* 27 Feb 1892, p138: *The First Rear Driven Bicycle* (Editorial comment re James Johnston). 5 March 1892, pp151, 152: *More about The Origin of the Rear Driven Bicycle* Jas Johnston. 19 March 1892, pp181, 182: *More about The Origin of the Rear Driven Bicycle Kirkpatrick MacMillan's Claim Substantiated* Jas Johnston. 26 March 1892, p205: *The First Rear Driven Bicycle* (Letter from Andrew MacMillan Todd). 9 April 1892, p237: *The First Rear Driven Safety* (Comment acknowledging Jas Johnston/MacMillan claim reprinted from *Sport* magazine). 23 April 1892, p268: *The First Rear Driven Bicycle Kirkpatrick MacMillan's claim admitted to be correct.*

THE BONESHAKER, The Magazine of the SVCC/VCC, England. No, pp5-18: *Alexandre Lefebvre's Velocipede* RITCHIE, Andrew. No 113 Spring 1987, pp25-29: *The First Bicycle* CLAYTON, Nick. No 127 Winter 1991, pp11-22: *What Did Kirkpatrick MacMillan Invent?* DODDS, Alistair.

COVENTRY HERALD & FREE PRESS, 15 July 1892, p8, Col 2: *The Evolution of The Cycle* (Abridged from the 'Strand' magazine for July).

CTC GAZETTE, London, Nov 1938, pp388, 389: *The Birth of The Bicycle* 'PETRONELLA'.

THE CYCLIST AND BICYCLING & TRICYCLING TRADES REVIEW, London/Coventry, 23 March 1898, pp314-317: Various, see p316: *A Chapter of History* (Ref to A Slade story, see 'the Hub' 23 April 1898).

DUMFRIES AND GALLOWAY COURIER, Dumfries, 13 June 1842, p3, Col 1: *The Velocipede.* 24 April 1897, p5, Col 5: *Who Made The First Bicycle?* (Letter from 'R.S.' Claiming Charteris' precedent for rear driving). 28 April 1897, p5, Col 2: *The Bicycle* (Letter from 'A Dumfriesian' re above). 8 May 1897, p5, Col 3: *The First Bicycle* (Letter from James Johnston refuting ;RS; claim). 12 May 1897, p7, Col 3: *The First Bicycle* (Letter from James Johnston adding to above).

DUMFRIES AND GALLOWAY STANDARD AND ADVERTISER, Dumfries, 24 Feb 1892, p , Col : *The Inventor of the Bicycle - McMillan's Claim Fully Established.* 15 June 1895, p7, Col 4: *More About the First Bicycle and its Inventor.* 2 June 1897, p4, Col 2-3: *The Evolution of the Cycle*, p6, Col 3-4: *The Origin of the Cycle* A talk with an Old Dumfriesian about this and other things (An 'interesting conversation' with Mr David Johnston [Nephew of James Charteris]). 16 June 1897, p3, Cols 3, 4, 5: *The Invention of The Bicycle* James Johnston (Response to columns of 2 June). 19 June 1897 (Saturday Standard), p3, Col 5: *The Invention of The Bicycle* (Letter from 'RS' and section of 'Bike' article) (Robert Service).

ENGLISH MECHANIC AND MIRROR OF SCIENCE, London, Vol 9, 14 May 1869, p173: Letters to The Editor, *The Kilmarnock Velocipede* (Sgd 'Mechanical Hawk'). Vol 9, 11 June 1869, p271: Letters to The Editor, *The Improved Kilmarnock Velocipede* (Sgd 'Mechanical Hawk').

GALLOVIDIAN, Dumfries, Vol 1, No 4 Winter 1899, pp145-151: *The First Bicycle* JOHNSTON, James. Gallovidian Annual, Dumfries 1944, pp49-63: *He Builded Better than He Knew, The story of Kirkpatrick MacMillan* IRVING, J. Gordon.

GLASGOW ARGUS, Glasgow, 9 June 1842, p2, Col 4: *The Velocipede.*

(GLASGOW) EVENING TIMES, Glasgow, 5 Feb 1992, p4, Col 1: *'Who Invented the Bicycle?'* (Letter to the editor of the Evening Times). 6 Feb 1992, p4 Col 6: *'Who Invented the Bicycle?' (Letter from 'Ben Jubal'). 8 June 1897, p4 Col 2: James Johnston.*

GLASGOW HERALD, Glasgow, 10 June 1842, p2, Col 7: *The Velocipede.*

HAMILTON ADVERTISER, Hamilton, 19 June 1869, p2, Col 7: *Velocipedes.* 10 July 1869, p2 Cols 8 & 9: *Velocipedes.*

HUB (The), London, 26 Feb 1898, pp141, 142: *How we got the cycle - the Curious Phases Through which the Wheel has Passed.* 18 March 1898, p27: Tit Bits of Cycling Information, *The First Practical Bicycle* Mr James Johnston of Glasgow writes. 23

April 1898, pp453, 454: *The Maker of The First Rear Driver* (Article suggesting 'An Englishman in England' [A. Slade] built the MacMillan machine to MacMillan's design). 30 April 1898, p512: *The Maker of the First Rear Driver* (Repudiating the above as 'a comedy of errors' - Sgd 'Your representative'). 11 Feb 1899, p58: *Perpetuating an Error*. 4 March 1899, pp178, 179: *the Invention of The Bicycle* (Letter from James Johnston re editorial remark above).

KILMARNOCK STANDARD, Kilmarnock, 9 April 1904, p5, Col 6: *Death of Mr Thomas McCall 1834-1904, A Bicycle Pioneer.*

NORTH BRITISH DAILY MAIL, Glasgow, 21 August 1884, p5, Col 1: *An Early Scotch Velocipedist* (Letter Sgd N.F.). 22 August 1884, p3, Col 2: *A Chaise Without Horses*, p4, Col 5: *An Early Scotch Velocipedist* (5 letters). 23 August 1884, p2, Col 4: *An Early Scotch Velocipedist* (Letter Sgd 'Avon'). 27 August 1884, p3, Col 1: *An Early Scotch Velocipedist* (2 letters Sgd 'A Native of Keir' and James Smith Jun). 28 August 1884, p3, Col 3: *An Early Scotch Velocipedist* (Letter Sgd N.F.).

SCOTTISH CYCLIST, Glasgow, 12 Dec 1888, p551: Mention of Johnston's work in *'Hotch Potch'*. 23 Jan 1889, p37: *'En Passant'*, p38: *'Hotch Potch'*. 20 Feb 1889, pp103, 104: *'The Original Bicycle The Prototype of the Modern Rear Driving Safety'*. 24 April 1889, p239: *'The Original Bicycle'* (Extract of article in 'last week's B.N.'). 10 Feb 1892, pp87, 88: *'The First Rear Driven Bicycle, A Revival of the Question of Origin'*. 17 Feb 1892, pp104-106: *The First Gear Driven Cycle* 'St Mungo' writes. . . . 27 April 1892, p227 Leader, p281: *'MacMillan v Dalzell - A Satisfactory Conclusion'*. 9 June 1897, pp529: *The Invention of The Bicycle - Another Scottish Claimant.*

SPORT, Dublin, 26 March 1892, p3, Col 2: (small paragraph on Jas Johnston BN Articles).

STRAND MAGAZINE, London, July 1892, Vol IV, pp29-36: *The Evolution of The Cycle.*

TAKE NOTE, The Magazine of the Scottish Tourist Board, Edinburgh, July 1959, pp15, 16: *Scot Built First Bicycle - Gordon Irving Spotlights, Kirkpatrick MacMillan.*

TRANSACTIONS OF DUMFRIESSHIRE AND GALLOWAY NATURAL HISTORY AND ANTIQUARIAN SOCIETY, Vol XXIV - 1945-1946, pp144-149: *John Gibson: An Early Nineteenth Century Innovator* CRAIG, Bryce.

REFERENCES UNCERTAIN

The following are photocopies of articles which I acquired without sources or location.

CYCLING, Aug 1879, p12: *The First Bicycle* (This refers to a claim made in favour of Gavin Dalzell by 'Bohemian' in 'one of our weekly contemporaries'). Possibly from 'Cycling' a monthly magazine mentioned in Spencer, *'Bicycles & Tricycles Past and Present . . .'* as published by W.D. Welford, Pilgrim Street, Newcastle upon Tyne since 1878. 'Cycling' first appears in *'May's Press Guide'* in 1880 as published by W. Bell, Newcastle upon Tyne since 1879. It seems to be no relation to the later magazine published under this title.

CATALOGUE TO THE GLASGOW EXHIBITION, 1888, p236: *The Bishop's Castle* Exhibit No 1311 (Description on the exhibition of Dalzell's machine). This is **not** the *'Official Catalogue'* (T.A. Constable, Edinburgh, 1888) which is held at the Mitchell Library, Glasgow; and the National Library, Edinburgh.

QUESTIONS

Roberts: Before we start on discussions I should like to mention that there is a tradition in the McCall family that he saw the MacMillan machine and made his copies on the basis of what he remembered. We did not hear McCall mentioned.

Oddy: Yes there is a lot of circumstantial but very believable evidence to this effect,

Lessing: I remember ten years ago you, Derek, gave me copies of the Johnston evidence and reading the final paragraph I concluded that this was the worst kind of oral history. In this case one should perhaps try to redate the Dalzell machine and say why these are not just hindwheel clones. People having seen the Michaux velocipede then produced such hindwheel machines. Not having access to the British sources I would find it difficult to discover the first references to the Dalzell machine. But people habitually argue that they were doing something ten years before they actually did so,but this is a silly notion for one can be safe in accepting that as soon as it is in the technical literature then it is designed the same year.

Oddy: With Macmillan it is more difficult. There is so much weight to Johnston's evidence that a good proportion must be true. Macmillan did do something and it points to some kind of crank mechanism. But this was not a major object it seems to have been more or less a hobby with him. However the article suggests that someone was in the Gorbals in 1842 although the important fact to the reporter was that a child was run over, only secondarily that the machine was quite interesting.

Seray: You did not speak of Dalzell. This report of 1842 is unclear and the matter is very important. If there was not a pedal involved then Macmillan has no priority over Dalzell.

Oddy: The problem is that faced with Johnston's evidence you have to accept that Macmillan made a pedal-driven machine sometime but at the time of the 1842 article the machine may well have been hand drive. Macmillan probably thought of different machines, it is not possible to say, but his claim is to me fairly believable.

Seray: I think the key is whether the machine referred to in that report had two or three wheels. If it had two then it was balancing. It is very important.

Oddy: Yes but the whole point of my paper is to get away from that type of discussion. One can accept the Macmillan, Dalzell, McCall and Dumfries machines may have become a local type form but they did not become an important factor in the development of the bicycle as we know it. There is all this business of fighting over minor points of priority where really there is not much reason to do so. I would rather people were interested in trying to get involved in the broader contextual history of machines just like in Dr. Lessing's paper this morning I was interested in the bit about the students riots.

Seray: I think this is very important whether Dalzell or MacMillan had priority if this is to be considered the first bicycle.

Roberts: You have to admit that Dalzell's son accepted that Dalzell did not invent the bicycle.

Oddy: You can argue over this for ever if you want to.
Can I have another question?

Millward: What you were saying is that the very fact that we are celebrating this is indicative of the state of cycle history at this time.

Oddy: Yes. I am not against rallies and events but I think they are for cycling enthusiasts and not for public displays. Arguments about whether or not you should dress up for events is irrelevant for if you get a lot of people on boneshakers or pennyfarthings in the streets everyone says look at those eccentrics on cronky bikes and that image is what I feel we should get away from. The other thing that concerns me is that we have the celebration of something which is historically difficult to pin down. I think it is therefore quite a good time to have a conference for as Derek Roberts mentioned for every history book published with a

reasonable perspective there is another of the Gordon Irving type, or of the rivet-counting genre which is meaningless to most people. Whilst the danger of ultimate connoisseurs, of rivet-counting does in the end leave you with a definite fact or resource, what is going on at Drumlanrig at the moment is the way to theme park history of the type which we here should not be trying to encourage

Roberts: Are you saying that one is unable to combine the two?

Oddy: It is very difficult to combine the two, Either you get people retracting into the little areas of very definite fact or you get the emphasis on the big public display. And it is difficult to present the objects in a sensible way because you are dealing with the matter of context. Unless you have unmade roads you cannot really ride an iron wheeled machine with any idea of the original conditions and the attitude of the passer by is of an idiot contraption which it probably wasn't in its day. Public conceptions are so ingrained with the sort of 'Genevieve' approach to old objects that it is difficult to combine the two now.

Clayton: I agree with what you have said but I think it is difficult for this conference, which will go largely unreported, to change the public image. However there is a point which Seray is bringing out which might be cleared up. As I understand Seray's book he examines at length the priority of Macmillan and Dalzell and concludes that Dalzell has priority. He considers this important to his readers as it has been important in previous French texts. I think this is a misunderstanding of English texts as

a: the matter can never be resolved and

b: it is not of the slightest importance because Macmillan and Dalzell are not important. However it may be difficult for this to be understood in France just as we may have difficulty understanding about French machines. For Seray's readership in France cycling is more important, Macmillan still has a capital M. I think that as cycling historians, if we could do anything at this conference, it would be to reach consensus on what is and what is not important. I wonder whether Seray has adequately expressed the concern he has for this particular point. It is not correct for us to write it off as though we haven't considered the priority, it has been considered in great detail.

Seray: It is not just a point of priorities. I do not believe there is any proof that Macmillan invented anything whereas Dalzell's case there is the testimony of his son even if that is questionable.

Oddy: I do not believe Dalzell was first in that context but if he were so be it. If Macmillan did not exist at all we are still left with a man, Dalzell in this case, who would become the seminal man who invented the bicycle,when of course he did not invent the bicycle as we know it.

Roberts: We should remember that we are looking at this with modern eyes. If we go back to the 1890s Dalzell was accepted as the inventor of the bicycle and Johnston had to prove it against people who did not want to believe it.

Oddy: I believe that what Johnston proved is right. It is unfortunate that we do not have Johnston's archive as he may have turned up all sorts of stuff which he deemed not useful. I think it is interesting how Johnston's researches were received at the time. Even though he was promoting one Scot over another he still had opposition to his ideas.

Seray: I believe that the question of balancing a two wheeler was achieved in Scotland whether it was Macmillan or not. And certain others like Johnston should be removed from the debate.

Oddy: I think it would be difficult now to eliminate Johnston or even Gordon Irvine.

Bowerman: Nicholas Oddy disparages the concept of K.M.150 as 'theme park history' and is suggesting that we should concentrate more on social history. Is there not the danger that fewer and fewer people become more and more specialised. The whole point of such an event is that it brings wide publicity to the history of the bicycle and it brings in more and more people who are interested and who may not know that there are people with similar interests.

Oddy: It does come over that I am disparaging all events. This is not so but I am against events where there is a lot of bogus history. The publicity for this one has been built around seminal names and dates and the danger of associating it with Kirpatrick MacMillan is that one instantly overlay it with nationalism of the Gordon Irvine approach. There is a danger of it being turned into a spectacle rather than an event and it works against the business of looking at the actual machines.

Bowerman: Well that does increase public awareness.

Oddy: I think there is enough enthusiasm in the subject for it to roll along now without having constant steroids shot into its arm.

Bowerman: I take your point and I agree that the old myths have been brought out this week for instance by radio presenters and by the Provost of Dumfries even when they have been told that there is no truth in them.

Oddy: I think the myths are in fact encouraged by having an event around KM 150 rather than just having a conference and having an international rally. It is not the event that is the problem but the way in which some people are going around publicising it.

Stockdale: As someone who has listened to what you have said and in consequence decided to cancel my ride from Glasgow to Dumfries on my boneshaker I think the object which you have produced today is absolutely fascinating. Rather than discussing paperwork which does not exist or has been lost here we have something which we can discuss and try to surmise what it is. Woodwork experts will no doubt take it apart and decide if it is the forerunner of the man we are actually talking about. Macmillan may have copied something from an earlier period.

Oddy: It literally turned up only a week ago. I am happy to agree that it is authentic, it has the right type of credentials. Alex Brown is taking it to his museum at Drumlanrig. It seems that the metalwork is smith made.

Roberts: Thank you Nicholas we must break there but there may be some time available at the end of the afternoon to examine the machine in more detail.

31st May continued discussion

Street: I would like to direct a question through Oddy to Roberts asking how he sees this startling new information regarding the 1841 census return which shows Macmillan working in Glasgow.

Oddy: Certainly there is a good chance that at the time of the machine's supposed construction Macmillan was working in Glasgow which would have given him better equipment for turning out such a machine.

Bowerman: What you are saying is not that Macmillan didn't produce these machines at this time but that it is unlikely that he produced them at Courthill smithy.

Oddy: Yes, I think that is the least likely of all the places. It is more likely to have been Drumlanrig or Malamford if it was in Dumfries. I would add that there is the Buccleugh archive in Edinburgh which might yield lists of employees of the estate and dates when he was in Dumfries.

Roberts: I should wish to reserve comment until I have had a chance to review the new information and to compare it with what we already know.

Bowerman: You seem to maintain that the pursuit of cycling history should be a purely academic matter studying sources etc.

I would like to put the thought to you that it can only be done successfully by practising cyclists.

Oddy: I think that depends on what areas of cycling history you are tackling. It would not be necessary for instance for studying the economics of the cycle industry. It might be an advantage in discussing the differences in mechanisms. And when discussing MacMillan you don't need to have ridden a MacMillan type machine. The point of my paper does not need to be about a bicycle. It relates to the seminal object being built up into a heroic history for nationalistic or family reasons. It might have been about a steam engine or any other object.

Seray: I do not think you need to be a cyclist or a mechanic even. I have written a book of cycling history and am not particularly keen on the mechanical aspect.

Besse: I think it would be useful if we were to seek the help of metallurgists and other experts in the dating of these disputed machines.

Clayton: I took a Michaux boneshaker to the Iron Bridge Museum and the experts were unsure whether it was a casting or a forging.

Lessing: Perhaps more experience with the restoration and metal analysis will help. Most people in Germany imagine Benz invented the first car by carving it out of a block of metal rather than modifying a tricycle. I think that analysis of the tubing of this car would probably prove that it came from Coventry.

Millward: I think that we have to make ourselves aware of the wider sweep of technological development and not study cycle history in isolation.

Note to Stockdale's comment in the discussion:

Just before opening the conference Alex Brown, curator of the cycle museum at Drumlanrig Castle, acquired the remains of a rear drive velocipede, the driving gear of which is operated by food paddles, transmission being by connecting rods to cranks on the rear wheel. Alex Brown kindly lent me the machine to exhibit at the conference, but unfortunately it was at too short notice to be written in to my paper. This machine was reputed to originate from the South-West of Scotland, and in terms of detailing and finishing would certainly seem to date from about the time of Macmillan's machine. However, in design terms it is somewhat different to both the Dalzell machine and the popular conception of the Macmillan being much more akin to a Draisienne in its forward structure.

Because there are no surviving front wheels, bearings or carrying frame it is difficult to be certain if the machine was two or three wheeled. What it does suggest is that there might have been a 'school' of rear-driven velocipede makers in the South West of Scotland at the period, albeit on a limited scale, a view also proposed by Alistair Dodds in *The Boneshaker* (No 137 Winter 1991 'What did Kirkpatrick Macmillan Invent?' p13). This view might also be reinforced by comparing the recently published photograph of (probably!) Macmillan on a tricycle, (ibid pp18/19), to the Alex Brown machine. The woodwork of the tricycle is crude, very different to the highly finished work of the Alex Brown machine which seems to be more the product of a cartwright than a blacksmith. The same could be said of the Brown machine compared to the Dalzell.

Whatever the story behind the Alex Brown velocipede, even if it was conclusively proven to have had two wheels and to have been made in the early 1830s by yet another 'inventor of the rear driven cycle', its place in history would still be at the entrance to a short cul-de-sac in cycle design, ending in McCall's machines in the late 1860s and seemingly never spreading beyond the South West of Scotland. It is, like the Macmillan machine, of little importance to the development of cycles as we know them today.

Postscript

Since the Glasgow conferences there have been two important contributions to the subject of Macmillan.

The first is the excellent paper by Alastair Dodds published in *'The Boneshaker'* 'What Did Kirkpatrick MacMillan Invent?' (No 127 Winter 1991, pp11-22). The second is the section on Macmillan, Dalzell and Lefebvre in Derek Robert's *'Cycling History, Myths and Queries'* (1991) pp19-27. As Derek Roberts specifically mentions my paper in this book (p19 Query No 34) I feel that I should make some comment. Derek Roberts seems to assume that I set out to prove the Macmillan story untrue, which is not the case. I tried to make it clear in my paper that I have no reason to doubt that Kirkpatrick Macmillan was active in cycle design in c1840 and that he might well have produced the machine he is supposed to have, but that actually there is little solid evidence to back this up, yet an entire quasi-factual story has been built round Macmillan. What I was trying to get over in my paper is that the whole Macmillan story is an example of a type of history which is, from most serious academic viewpoints, severely flawed. The purpose of the paper was to encourage cycling historians to question what sort of history they should be promoting, not to disprove or prove the genuineness of Macmillan's invention.

ACKNOWLEDGEMENTS

Thanks are due to Nick Clayton whose file of letters and other Macmillan documentation was invaluable to me in the preparation of this paper. To Alastair Dodds who gave me a verbal preview of the research he was later to publish in 'The Boneshaker'. To Alex Brown who lent me the mortal remains of a rear-driven velocipede to show at the conference.