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British Infantry Equipments 1808-1908

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Text and colour plates by MIKE CHAPPELL

MEN-AT-ARMS SERIES

EDITOR : MARTIN WINDROW

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This book is dedicated to the memory of two 'Old Contemptibles': Private George Green, 2nd Royal Welsh Fusiliers, and Private 'Pedlar' Palmer, ASC and King's Royal Rifle Corps – my maternal grandfather and maternal step-grandfather respectively. George Green was killed at Givenchy in September 1915, and Pedlar was severely wounded at Bapaume in the German spring offensive of 1918. The memory of my grandfather, and Pedlar's stories of the 'last war' aroused in me as a boy the desire to be a soldier, and also a sympathy for Tommy Atkins which has led, after many years, to this book.

British Infantry Equipments 1808-1908



The period covered by this book begins with the British infantryman entering the Peninsular War wearing the lethal knapsack equipment of the day, and ends with the introduction of the first equipment set made entirely of woven cotton webbing, the 1908 pattern described in the accompanying Men-at-Arms title *British Infantry* Equipments 1908–80.

The contrast between the two sets could not be more stark, and reflects the vast improvement in the infantryman's lot which took place during the 19th century. Yet it must be remembered that for nearly 50 years of the period under study the influence of the Duke of Wellington-though arguably the greatest military leader Britain ever produced-kept the British Army in a state of stagnation. The infantry who had contributed so much to his enviable reputation and numerous honours were served badly by him in the years after Waterloo and up to his death in 1852. Determined to maintain his army in the state in which it had won its greatest triumphs, the Duke created a reactionary atmosphere powerful enough to daunt the most ardent reformer. The army that set sail for the Crimea shortly after the death of the Duke had an infantry element clothed, equipped and armed in much the same

manner as the Peninsular infantry. Commanded by a protégé of the Duke of Wellington almost as conservative as the great man himself, the expedition to Russia was ripe for disaster. That no major military defeat ensued was probably due to the stoic courage of the common soldier and the leadership and professional ability of officers up to regimental level. Eventually Raglan's death, and the public reaction to the reports of military and administrative incompetence in the Press at home, created the right climate for the commencement of army reforms so long overdue.

The more glaring deficiencies were put to

The 1829 pattern version of 'Mr Trotter's knapsack'. Made of canvas over a wooden frame, it had leather reinforcement at the corners and was lacquered black. Note the method of attaching the mess-tin in its oilskin case and the regimental number in white.



rights while the Crimean War was still in progress. The infantry, some of whom had sailed for the war with smooth-bore muskets, were reequipped with one of the finest rifles of the time, the 1853 pattern Enfield (thus making Rifle Regiments redundant in the specialist rôle they had performed since the early years of the century). Efforts were made to improve the clothing, diet, shelter, sanitation and health of the soldier in the field on an unprecedented scale. The years that followed the end of the war saw a steady and consistent process of reform which gradually brought the British Army up to par with the armies of the great European powers. The infantry was frequently re-equipped with weapons every bit as good as any in service in the world; the system of Purchasing Commissions, with all its attendant iniquities, was abolished; schools of instruction were established to improve professional standards; barracks and camps were built with a view to the comfort and health of the soldier; terms of enlistment and reserve service were amended, and the clothing and diet of the soldier were constantly improved.

Amidst all this improvement the equipment of the infantry soldier was late coming under scrutiny. Not until 1871 was a pattern of equipment approved for issue which equalled the modern designs current in France and Prussia. Until then the best that could be done for the British infantryman was to modify the shape or

The 1829 pattern knapsack viewed from the side worn next to the body, and with the flaps open. Note the buckles and straps for securing the four flaps, and the larger buckles for the attachment of the shoulder- and pack-straps.



size of his knapsack. (This had been done several times since the original issue of the box-knapsack prior to 1808.) Thus the infantry saw little change in the design and style of their personal equipment from 1808 to 1871. In this respect the regime of the Iron Duke died hard; and the consequent suffering of generations of footsoldiers—at a time when that description was a literal one—can only be understood fully by reading the medical reports on the discharge certificates of the day. These men were usually broken in health as much by the cruel burden of their equipment as by the conditions of service.

With the introduction of the 1871 Valise equipment the practice of the infantry soldier carrying all his worldly goods into battle disappeared entirely. Campaign uniforms, and 'scales of necessities' calculated by committees studying the needs of the soldier in the field, relegated full dress and other barrack items to stores or baggage dumps before active service commenced. At the design stage of the 1871 equipment the maximum weight the infantryman should carry was reckoned at about 45lb, a considerable reduction from the 60lb of the Peninsular soldier.

The years from 1871 to the end of the 19th century saw great competition to improve the existing design, and two more patterns of infantry valise equipment in white buff leather were introduced before experience in the Boer War of 1899–1902 showed up the shortcomings of that material in war. The pattern of infantry equipment introduced in 1903 was therefore manufactured from tanned brown hide.

Officers' personal equipment underwent improvement from the middle of the century, and in particular from the advent of the percussion revolver. Up to this time infantry officers in battle carried little more than a sword worn either in a frog from some form of shoulder-belt or waistbelt, or suspended by slings from either. Single-shot pistols were of little use in a mêlée, being simply an encumbrance after discharge; but a five- or six-shot revolver—particularly one of large calibre and double-action capability—was a very useful item at close quarters, and infantry officers were quick to purchase Tranter's, Adams's and Colt's inventions as soon as they were marketed. (It must be remembered that in the 1850s officers purchased all their clothing, weapons and equipment, and personal choice in revolvers depended on experience or whim. Infantry company officers who might expect to find themselves at the head of their troops in a bayonet-to-spear encounter with massed natives needed all the edge they could purchase. This probably accounts for the popularity of the English double-action revolver over the single-action American item. Even with an occasional misfire the rate of point-blank fire put out by a double-action revolver was impressive, certainly to Dervishes or mutinous sepoys.)

The harness to carry a sword and pistol invented by the legendary General Sam Browne vc to enable him to overcome the disability of the loss of his left arm, and thus to be able to draw either pistol or sword with his right, was quickly recognized as a thoroughly good design with a much more general application. In the second half of the 19th century it gradually replaced other forms of officers' equipment for active service, and was eventually approved as a regulation pattern at the end of the century. The excellence of the Sam Browne belt was confirmed by its being widely copied by armies throughout the world, and it was almost universally the mark of an officer in the early years of the 20th century.

The rigours of colonial campaigning in extremes of climate and difficult terrain, and improving standards of professionalism, added to the personal burden of the British infantry officer; by the end of the 19th century his regulation equipment included water-bottle, haversack, binoculars and slung greatcoat as well as pistol and sword. No longer could a company officer rely on his personal baggage animal coming up at the end of a hard day in the field. The gentlemen's code that had permitted such niceties in the Peninsular and Crimean Wars was not observed by Afghans and Zulus. Baggage trains had to be heavily guarded on colonial campaigns, and bitter experience led to the reduction of the size of trains and the quantity of non-essential items carried. It followed, therefore, that the infantry officer had to carry more of his own equipment than ever before and to share the hardships of campaigning with his men to an unprecedented degree.



Typical pouch worn with the knapsack equipment. Made of black leather with a white buff shoulder-belt, the ammunition content varied according to the type of musket or rifle in use, but 40 to 60 rounds was the usual load.

Method of attachment of the shoulder-belt to the pouch. The ends of the shoulder-belt were tapered to fit the loops on the rear face of the pouch. The ends then buckled beneath the pouch.



This was to prove to be no bad thing as far as example and leadership were concerned. The British soldier, even under the harsh and repressive discipline of the Peninsula, had always been critical of the behaviour of his officers. The highest standard of bravery was expected—and

A typical private of the 1812–14 period. Note the straps for the haversack and canteen—worn on the left side—and the connecting strap for the knapsack shoulder-straps.



nearly always shown—in battle; but some officers, particularly in the Wellington era, considered that their duty ended there, and looked to their own comfort and welfare first, and sometimes exclusively. Officers who showed a fraction of the consideration for their men expected of all leaders in today's army were rewarded by a devotion so great as to be almost beyond comprehension in the sophisticated world of today. Consequently, when officers shared the lot of their men on campaign to the extent of carrying a similar burden, eating the same food and sharing the discomforts of climate, a bond was forged between them and their men that made possible the performance of prodigious military feats.

No study of infantry personal equipment in the 19th century could ignore the lists of contents of the knapsacks, valises, haversacks and pouches in question. When examining these, especially retrospectively from an age of special-to-climate protective clothing, one is bound to be struck by the fact that the soldier of the early 1800s was expected to perform his duties in any extreme of climate wearing his red-coated home service uniform, with nothing but a greatcoat or blanket for additional protection. In the rain he was soaked to the skin, in the snow he froze, and in the heat of an Indian or Spanish summer he suffered agonies in his heavy uniform and equipment. That these men were hardy goes without saying; but although the fittest survived the ordeal of marching for months under loads of up to 60lb in these climatic conditions, it was not without a gradual erosion of health and strength. It is surprising that it took so long for the authorities to realize that a small outlay on adequate protective clothing and equipment would cut down the sick list and help maintain the effective strength of battalions. The most glaring deficiency in the British infantryman's field kit was the absence of any kind of waterproof. In an age when the American soldier had been equipped with his 'gum-blanket' or rubberized poncho since the middle of the century, the British soldier continued to endure soakings in wet weather, until the issue of the groundsheet cape many years later. How many soldiers succumbed to exposure and pneumonia for the want of this simple item is beyond calcu-



lation. Even the bivouac tent or shelter-half was standard in the French and United States armies for years before the British soldier received an equivalent item. (Some years ago the author had the opportunity to visit the graves of British soldiers who died in and around Elandslaagte, South Africa, in the Boer War. Of the many men buried there very few had been killed or had died of wounds as a result of enemy action. The majority had died from 'sickness'. One wonders how many of these might have survived with adequate protection from the elements.)

Only one item of equipment survived in service throughout the century covered by this book. The kidney or 'D'-section mess-tin taken into service in 1814 (as a result, legend has it, of a directive from the Duke of Wellington himself) was still in issue in 1908 and continued to be so until the outbreak of the Second World War. It was thus in use for 125 years.

Regarding the remainder of the items carried on campaign in the knapsack or valise of the British infantryman, study shows a recurring habit of packing into a field kit articles which—it might be argued—had no place there at all. Mention has already been made of the soldier of the Napoleonic Wars carrying his whole ward-

A series of engravings made from contemporary photographs for official publications. They show soldiers of the 26th and 20th Regiments in the 1871 Valise equipment Marching Order. Both the black and white pouches are shown. The two rear views show the comparison between men of 5ft 6in. and 5ft 10in. in height. Note the regimental numbers and the glengarry caps. (Author's collection)

robe wherever he went. This was unavoidable at the time: there was often nowhere else to store it, and space for it would not be allowed in regimental baggage. Therefore the soldier either carried it, threw it away, or sold or exchanged it, careless of the day when a kit inspection would show up the deficiency, which would then have to be paid for! Even in the more enlightened days which followed the Crimean War the British infantryman was still, at times, required to fight carrying articles such as spare trousers, shirt and boots, cleaning kit and toilet articles over and above essential items such as weapons and ammunition, food, water and a greatcoat. The staff mentality that required soldiers of the Zulu War of 1879 to pack such items in their valises, but made no adequate provision for the rapid resupply of ammunition when the 40 or 70 rounds each man carried was running out, is hard to understand today. (Orders for the time listed an additional 20 rounds of ammunition to be



carried in the valise along with the spare trousers, etc.—a curious mixture of essential and non-essential! As the valises of the 24th Foot at Isandhlwana were either in the baggage carts or the bivouac area, 20,000 rounds of ammunition were not available to the men at a most critical time.)

Costly disasters such as Isandhlwana resulted in innovations such as pack-mules with reserve ammunition moving with marching columns; but the thorny problem of what the infantry soldier should and should not carry in action has never adequately been resolved, even today. What is, and always has been beyond dispute is thathowever well designed a set of equipment-the more a marching soldier is burdened, the more his rate and range of mobility is curtailed. Random examples may serve to illustrate this. Sir John Moore's army of 1809 'racing' the French the 120 miles from Astorga to Corunna through appalling conditions of terrain and weather, and encumbered with up to 60lb per man, averaged about 10 miles per day. On the famous advance from Kabul to Kandahar in 1880 'Bobs' Roberts's men covered the 300 miles at an average of 14 miles per day, probably as a result of their leader's brilliant organization of his transport column, which allowed the marching men to carry less. In recent years infantrymen of the British Army of the Rhine were required as a fitness test to march in varied terrain and summer weather 100 miles in five days: this in full battle order weighing 40 to 50lb depending on the type of weapon and ammunition carried. Even more recently the annual battle efficiency test required all British infantry personnel under 40 years of age to cover 10 miles in one hour and fifty minutes in full battle order. This last feat had to be accomplished 'without distress'! It will therefore be seen that although spectacular speed-marches have always been possible, the infantry soldier of the 19th century, moving everywhere on foot, did so at a slow and laborious rate made slower with every extra pound he was made to carry.

One of the considerations which retarded progress in the design of British infantry equipment throughout the 19th century was that of appearance. The most revolutionary design was doomed from the start if it made the soldier look 'unmilitary'. Pipeclayed buff leather contrasting starkly with red coats and glossy black knapsacks, sharply squared-off and strapped high on the back, undoubtedly looked magnificent on parade. That they were less than ideal for the field mattered little to the contemporary military hierarchy. When the hideously uncomfortable box-knapsack (itself introduced because it looked smarter, even when empty, than the loose and more comfortable envelope knapsack) was replaced by the 1871 valise, many traditionalists were horrified by the way the new item sagged over the buttocks of the soldiers. Good though the 1871 valise was, it was soon modified to ride higher on the back, and was eventually replaced by a valise that rode, once more, squarely on the shoulders. Not until 1958 would a design of equipment similar to the 1871 pattern be accepted for service. Even when an equipment set made of brown leather was introduced in 1903, parts of the white buff equipment it replaced, the 1888 Slade-Wallace, were retained for barrack, ceremonial and walking-out purposes.

The appearance-before-convenience school of thought led to some strange attempts to extemporize field equipment prior to the arrival of a sensible design. The infantry element of the Crimean expeditionary force disembarked with most of their personal gear wrapped in blankets! This expedient led to ridiculous scenes as the bundles sagged and fell open on the march. When the uncomfortable box-knapsacks, which had been left in the ships, were eventually sent for, the discovery that they had been rifled added to the kit losses already sustained. In the 1860s Lord Wolseley vainly advocated the adoption of the American soldier's 'horseshoe' blanket roll as a way to dispense with the hated box-knapsack. He also favoured a drastic reduction in the amount of clothing and other kit carried, and claimed that his innovation would reduce the infantry soldier's load to just under 45lb. By the time the 1871 valise equipment became general issue in the early 1880s it had become standard practice to leave the valise in unit transport on active service, thus leaving the infantryman with rifle, bayonet, ammunition, water-bottle, haversack,



greatcoat and mess-tin to carry. It was in this order of equipment that the British infantry fought and marched in the campaigns of the closing years of the century.

The story of the development of the British infantryman's personal equipment from 1808 to 1908 is at times a catalogue of neglect and lack of imagination on the part of the responsible authorities. Despite this the foot-soldier of the time performed his duty, accoutred in his heavy and cumbersome gear, in a way that leaves the contemporary reader confounded with admiration. It is sad to record that, on the abolition of flogging as a form of disciplinary action, these fine soldiers were punished with pack drill. The military mind responsible for the introduction of this particular piece of malevolence must have been fully aware of the attitude of the soldier towards his burden.



The British infantry soldier of the Peninsular War was equipped in a style that differed little from infantrymen of the armies of France, Spain, Portugal, Italy and the German states. The development of infantry equipment world-wide had closely followed the example of France in the century prior to 1808, and all infantrymen of the European nations now wore crossbelts over the shoulders and chest supporting an ammunition pouch on the right side and a bayonet—and sometimes a sword also—on the left. To complete the equipment a knapsack made of hide or canvas was worn on the back supported by shoulder-

A sergeant of the 1812-14 period. Armed with a pike and sword, he wore no pouch; the canteen was therefore worn on the right side. straps. Rolled and strapped above the knapsack was a blanket or greatcoat; and most armies permitted a gourd, canteen or flask to be carried on campaign. The British were alone in issuing a haversack for the carriage of food in the field.

The common soldier of the time marched and fought in full dress—i.e. the only uniform he possessed apart from fatigue dress—and carried with him all the arms, ammunition, clothing and equipment issued to him, as well as any personal possessions he might have. There were no baggage trains, parks or forwarding organizations for the likes of him. He was expected to carry all he owned, plus any additional ammunition, boot leather, food or tools deemed vital to an operation or campaign by the staff.

In the British Army the infantryman's load was nearly always in the region of 60 lb. Only by jettisoning ammunition, clothing and spare shoes (not an unknown practice) and bolting food as soon as it was issued could weight be reduced; but this could be a risky business. British military discipline was severe enough in peacetime. In the field in time of war it was savage, and most soldiers would put up with the burden on their backs sooner than risk a flogging for 'losing' kit or ammunition. Even when discipline lapsed almost completely, such as on the retreat to Corunna, men died bound to their knapsacks sooner than get rid of them. The scant records that remain to tell the story of the Peninsular War from the ordinary soldier's viewpoint are unanimous in their condemnation of the cruel burden under which they marched and fought. Sympathize though the modern reader may, it is hard to see a way in which the burden of the soldier might have been reduced, given the attitude of command and staff. Supply of food, ammunition, spare clothing and shoes was extremely difficult to organize, hence the need for the soldier to carry his immediate reserve with him. One way in which the infantryman's burden might have been made more tolerable would have been to issue him with a set of comfortable and well-designed equipment, but this was not even considered until 60 years had passed, by which time, many of the supply problems of the Peninsula had been overcome.

If possible, an even more uncomfortable equip-

ment was issued at the time of the outbreak of the Peninsular War. From 1798 to 1805 the British infantryman had been equipped with a canvas knapsack which fastened together in the manner of an envelope. This knapsack had no rigidity, and contemporary illustrations show it as a rounded item, rather similar to a modern parachute pack, which sagged in the manner of a rucksack when not fully packed. In 1805 the contractor who supplied most of the Army's equipment designed and had accepted for service a new knapsack. His name was Trotter, and he operated a factory in Soho Square. He deserves to be remembered, for he and his invention were responsible for incalculable suffering over the next 70 years. The new knapsack was made from black lacquered canvas reinforced at the corners with leather and closing-unlike the earlier pattern-rather like a suitcase. In order to give the knapsack a smart, squared-off appearance Mr Trotter placed rectangles of board in the top, bottom and sides of his invention. Thus, even when empty, the knapsack was square and

First pattern valise for the 1871 equipment. Made of black lacquered canvas beaded with leather, it had white buff straps.



soldierly—or so thought the officers who accepted it from Mr Trotter. The opinions of the soldiers who had to wear it can be imagined! Photographs show that soldiers sometimes padded the part next to their backs in an effort to keep the sharp board in the bottom of the knapsack away from their spines.

Mr Trotter's invention served on until replaced

Section of an old print showing British infantry in action at Tel-el-Kebir in 1882. The men are in the 1871 Valise equipment Light Order, with the mess-tin worn where the folded greatcoat would normally go. Note the ammunition bag being worn from the intersection of the braces; and the Sam Browne equipment of the officer. (Author's collection) by the Valise equipment of 1871. His original knapsack was modified in 1824; made smaller and lighter in 1827; given a stronger wooden framework and a pocket in the flap in 1829; and was again reduced in size in its final model of 1857. The cruel irony of Trotter's knapsack is that it was considered a 'Camp Necessary', and had to be paid for by the soldiers from stoppages of pay or 'off-reckonings'.

The knapsack was borne on the back by means of shoulder-straps which attached to the upper and lower edges of the pack. These, in turn, were connected across the chest by two further straps which buckled together. Thus a soldier could choose between having the chest strap loose and suffering constriction of circulation to the arms



and hands, or buckling the chest strap tight to constrict breathing! Medical findings of the time refer to 'pack palsy', and much evidence exists that the knapsack and its straps caused swelling, numbness and pain. There were many compassionate officers who deplored this situation and pressed for a reduction in the infantryman's load and the replacement of the knapsack with a more comfortable item, but authority was indifferent to their pleas and it was many years before either request was considered.

The knapsack was not the only cumbersome and badly-designed item of equipment. The crossbelts supporting the bayonet and the black leather ammunition pouch constricted the chest and were badly balanced. The bayonet for the standard musket of the Peninsular War weighed one pound, its scabbard a few ounces more. The pouch containing 60 rounds of ball cartridge weighed six pounds. On the march the pouch beat against the hip, and when 'doubling' it had to be held down with one hand. The problem was slightly alleviated in the early 1850s when a waistbelt replaced the bayonet crossbelt. This buckled over the pouch-belt and secured it to the hip. (The bayonet was now carried in a frog.)

The canteen or water-bottle and the haversack were campaign items issued by the Board of Ordnance when infantry went into the field. The haversack was a canvas or coarse linen bag intended to carry rations. The 'Italian' canteen in use until the 1870s was another piece of equipment which drew criticism and even abuse from its users. Made like a small wooden keg, it was heavy and it leaked. (Metal flasks were prone to rust, and glass was too fragile for campaign, but it is hard to understand why a superior design of wooden canteen such as the 'Oliver' took until 1875 to appear.) Bound with metal and with a leather sling, the Italian canteen was cumbersome, and liable to bounce on the march. As access to the pouch was essential both the canteen and the haversack were worn over the right shoulder so as to hang over the bayonet on the left side. Only sergeants of Grenadier and centre companies, armed as they were with a pike and sword, could afford to wear the haversack and canteen more evenly balanced, i.e. on the right and left respectively.



The first pattern entrenching tool introduced into British service in 1884. (Contemporary spelling was 'intrenching' tool.) The grubber and pickhead fitted into the frog in the manner shown. A buckle and strap secured the head and a leather loop-permanently attached to the shaft-secured the tool to the bayonet scabbard.

Two items of equipment which appeared with the issue of percussion muskets were the cap and expense pouches. The cap pouch was a small hemispherical item usually made of sheepskin with the wool innermost. By this means the small copper percussion caps could be handled easily and extracted singly without spilling the others. Cap pouches were either carried in a slit in the coat (usually above the waist on the right side), or fitted to the pouch-belt. The expense pouch was intended to hold ammunition and to be more



accessible than the main pouch. Issued with the waistbelt, they were at first made of black leather, but later issues were made from white buff leather.

The last item of equipment to make up the field equipment of the British soldier was the mess-tin. The kidney or 'D'-section mess-tin first began to be issued in 1814. Prior to this troops had used a rather large metal dish-shaped item with handles. Contemporary drawings show this in extensive use in the Peninsula. Cooking was usually done in large cast-iron pots and the circular mess-tins were used as plates. Legend has it that the Duke of Wellington, seeing how easily soup could be heated in the tin pannikins of the French Army, ordered that a similar item be made for the British soldier. Whatever its origin, the kidney mess-tin was a good design and would see service for well over a century. The mess-tin was carried in a black oilskin cover and fixed to the knapsack flap, or strapped atop the knapsack if the greatcoat was being worn.

This, then, was the knapsack equipment worn from 1808 until the introduction of the Valise equipment in the 1870s. The main changes are set out below with their approximate dates. (Changes took many years to effect. After official approval had been given the process of manufacture, transportation and supply was slow, and it took years of painstaking work before the Quartermaster General could report that all units were now in possession of a new or modified item.)

(1) Knapsack. The 'Trotter' replaced the soft knapsack over the period of the Peninsular War. After this the modifications are as previously noted. (The breast-strap was dispensed with in the last model knapsack.)

(2) Crossbelts. The pouch and pouch-belt remained in service to the end, but the bayonet- or sword-belt with its decorative plate was replaced by a locket-buckle waistbelt in the early 1850s.

Engraving of a Scots Guards private on home service in 1882. He wears an unusual order of the 1871 Valise equipment—probably Field Day Order—with one pouch only, no canteen or haversack, and no mess-tin. This view shows the suspension of the valise well. (Author's collection)

With the waistbelt came the expense pouch.

(3) Canteen and haversack. Unchanged from the Peninsula until well after the Crimean War.
(4) Cap pouch. First appeared with the introduction into service of the first percussion muskets in the 1830s. Percussion arms became a general issue over the 1840s.

(5) Mess-tin. The kidney or 'D'-section messtin replaced the dish variety from 1814.

Unlike equipments which were to come later, there was only one 'order' of knapsack equipment -full. In the Peninsula troops might be seen minus their knapsacks and with a blanket or greatcoat rolled and strapped to the pouch belt while on guard or picket in bivouac, but in the face of the enemy they wore full kit. It was only years later that attempts were made to dispense with the knapsack in order to produce an order more suited for fighting. Mention has already been made of these efforts in the Crimea and, indeed, it is rare to find a photograph of a soldier of that time wearing his knapsack in the field.

All the straps of the knapsack equipment were made from buff leather which was then pipeclayed white. The only exceptions to this rule were the Rifle Regiments, who wore black leather equipment until the introduction of the 1903 equipment. The practice of regiments with buff



Final pattern pouch issued with the Slade-Wallace equipment. The flap opened outwards from the rear.

Waistbelt of the 1888 Valise equipment (Slade-Wallace). Note the central section with the three buckles.





Illustrations taken from the pamphlet issued with the 1882 Valise equipment. They show a line infantry private in Marching Order viewed from the front and the rear.

facings maintaining buff leather straps in their natural colour died out early in the century, although paintings do exist showing troops in the Peninsula with natural buff straps. (Whether this was regimental pride or a field expedient is hard to determine.)

The final word on the knapsack equipment is probably best put by quoting the story of the 28th Regiment. On entering Alexandria in 1801 the 28th found a French store of fine calfskin packs. They re-equipped themselves with these items and clung to them tenaciously through the Peninsular and Waterloo campaigns, until only sufficient packs were left to equip the flank companies. Only after Waterloo were they all forced to adopt Mr Trotter's article. Need more be said? The 1871 Valise Equipment

In the wave of Army reform which followed the Crimean War the knapsack equipment of the infantryman came under belated review.

The equipment of 1857 was as unsatisfactory as any previous pattern. The narrow shoulder-straps cut into the shoulders and armpits and, as in all previous patterns, the chest was constricted, in this case by the pouch-belt and the supporting straps for haversack and canteen. After marches in full equipment numbness of the arms and hands was a common experience for the soldier, sometimes lasting for 24 hours.

In 1865 a committee was established to examine 'the present system of carrying accoutrements, ammunition and kit of the Infantry soldier'. It had as its president Major-General Henry Eyre. The committee met four times between 1865 and 1868 to study various types of equipments, both experimental and those in use with foreign armies, taking medical evidence and deciding which patterns of equipment were worthy of troop trials. Four types were eventually issued in quantity to nine regiments, and testing began. The tests took the form of trials carried out under the supervision of medical officers, and a questionnaire was put to the troops who had worn the equipment on service.

As the committee obtained the findings of the first trials it began to set out specifications to govern future development. These were: (a) weight to be distributed over as large an area of the body as possible; (b) weight carried on the back should be counterbalanced by the weight of

A contemporary print showing Grenadier Guards in the 1882 Valise equipment. Note that the canteen is carried attached to the waistbelt. (Author's collection)



the ammunition to be carried; (c) weight should be close to the body and as near to its centre of gravity as possible; (d) no constriction of the armpit or chest; and (e) maximum load carried not to exceed 45lb.

Eventually a set of equipment designed by the committee itself found greatest favour with the troops conducting the tests, and formed the basis of what was to become the Valise equipment of 1871. The committee claimed that they had found the best and perhaps the only way in which military loads could be carried. There is good reason to believe them, for even though many other patterns of equipment superseded the 1871 Valise, many of the present-day sets of equipment in use world-wide, and in particular the British, bear a remarkable resemblance to that devised by the committee of 1865–68.

Although it was ready before 1871, issue of the new Valise equipment was delayed by the acceptance trials of the Martini-Henry rifle. Issues of the new equipment and rifle began in 1871, but inevitably it was many years before the Army was re-equipped with both. As late as 1876 it was noted that some units were still in possession of the knapsack equipment.

Description

The Valise equipment of 1871 was issued as a set comprising the following items:

Maxim gun detatchment, 1st Bn. King's Royal Rifle Corps, Chitral campaign, North-West Frontier, 1895. Note blackened 1888 Valise equipment: see colour plate F. (National Army Museum)

One valise. One belt, waist, with union locket.



One set of braces.

Two pouches, ammunition (contained 20 rounds each).

One bag, ammunition (contained 30 rounds).

One pair, straps, greatcoat.

One pair, straps, supporting, valise. One strap, mess-tin.

There were various modifications and alterations to the valise itself over the service life of the equipment. It started life as a simple satchel-like item made of black-varnished canvas edged and beaded with leather and with two buckles to secure the flap. The approximate dimensions were 14in. wide by 12in. high and 4in. in depth. The contents of the valise varied according to Regimental Standing Orders, but in its original form it contained the cape (usually folded under the flap in the manner of the groundsheet in the 1937 pattern haversack), trousers, socks, boots,

two brushes, holdall, shirt, towel and 20 rounds of ammunition. The valise was secured to the equipment set by attaching the upper inside edge to the braces and the lower inside edge to the brace rings by means of the valise straps. Properly fitted the valise was level with the upper edge of the waistbelt and rested on the buttocks.

The unique feature of the waistbelt was the provision of two triangular 'Ds' fitted into pockets on either side of the locket-buckle. These could be pulled out when required so that the straps from the brace rings could be attached. On to the waistbelt slid the bayonet-frog. The waistbelt, and most of the rest of the equipment, was made of buff leather which was pipeclayed white. Rifle regiments had black leather equipment. Union locket-buckles are shown in contemporary illustrations to be of a regimental pattern.

The braces, sometimes called the yoke-braces, were built around one of the key features of the equipment set, the brace rings. These were the balance points of the set, and most of the weight borne acted through these rings. As mentioned, the braces fastened to the waistbelt 'Ds' by means of an adjustable strap to the brace rings. Wider straps passed from the rings over the shoulders, crossed between the shoulder-blades—where they were secured by a brass stud—and refastened under the arms to the opposite brace ring. Sewn



1888 pattern valise.

into the rear of the braces were loops to take the greatcoat straps.

The ammunition pouches slid on to the waistbelt with simple loops and were worn on either side of the buckle. The ammunition bag was worn suspended from the right-hand brace ring in marching order, or from the rear intersection of the braces when the valise was not being worn. Pouches and ammunition bag were made of black leather in the first issues of the equipment, but the pouches were subsequently replaced by a modified pattern in whitened buff leather.

The greatcoat or blanket, having been folded flat, was strapped to the braces by means of the greatcoat straps. The forage cap—glengarry was tucked under the straps so that the badge showed to the rear.

The mess-tin strap secured the mess-tin, sometimes called canteen, in its oilskin cover to the top of the valise in full marching order. When the valise was not worn the mess-tin was fastened between the greatcoat straps.

To complete the set a haversack and waterbottle were issued, but these were not special to the 1871 equipment. The haversack was similar to previous patterns, and the water-bottle was of a type known as the Oliver. Introduced in 1875



it was made of wood, 'D'-sectioned to fit against the hip more comfortably, and with a patent stopper. The haversack, basically a ration-bag, was put on first and was thus worn under the equipment set. The water-bottle was put on last and over the equipment in order to be able to get at it more readily. It was unfortunate that the straps for the haversack and water-bottle crossed the chest in contradiction to the basic aim of the designers of the 1871 equipment.

There were two orders of assembly of the equipment. With the valise fitted the soldier was in Full Marching Order. Without the valise, and with the mess-tin strapped to the greatcoat, was the order in which the soldier fought.

Fitting was all-important with the 1871 equipment set. Braces came in four sizes (large, medium, medium small and small), and great care was exercised to ensure that the soldier had the correct size, for without it weight could not be borne comfortably. When fitting the valise the aim was to adjust the valise straps so that the valise was carried in the correct position, and then an air-space was left between the top of the valise and the body. Two small buckles were attached to the upper sides of the valise, 'to carry small articles on the march'. The strap of the water-bottle was usually secured to one of these buckles to hold it firmly against the side. When assembled the equipment could be put on and taken off like a coat. On the march the buckle could be unfastened for greater comfort. Care was also taken in the manner in which kit was stowed in the valise, and detailed instructions were laid down to show how this should be accomplished. The basic aim was to ensure that the softer items of clothing were packed to form a pad against the back. Even so the weight was probably excessive, and letters exist recommending that certain items, spare boots for example, could be dispensed with in field kit order to lighten the soldier's load.

The equipment was slightly modified during

its service life, having the valise redesigned, the attachment points of the valise altered, and better pouches issued. The first major modification came in 1882 with the valise being moved to a position higher on the back. The official reason for this was the instability of the valise in the 1871 position during the 'double'.

The 1871 Valise equipment was welcomed by the troops as a great improvement on the equipment it replaced. Unfortunately it met with disapproval because of its revolutionary appearance. The valise, worn in what was considered an unmilitary position, was rarely carried on service. There was little protest when the set was modified and eventually replaced. Hope springs eternal, and to a marching soldier of the 1880s, encumbered as he was, there was a chance that a new equipment modification or design might ease his misery. It is doubtful whether this was the case with the equipments which succeeded the 1871 Valise. Born out of a great deal of research at a time of sweeping change for the British Army, it ranks as one of the best designs of its time. The principles governing its design are as valid today as they were 110 years ago.



Although sealed as the pattern of 1871 it took some time to re-equip the infantry with the new Valise equipment. Inspection returns show units still in possession of the knapsack equipment as late as 1876 and, with the manufacture and supply of equipment being what they were in the late 19th century, it was only when the 1870s were drawing to a close that the infantry arm was completely re-equipped with the 1871 Valise.

Scarcely had a general issue been achieved than attempts were put in hand to modify and

Two private soldiers of the newly formed Irish Guards pose in the 1888 Valise equipment Full Marching Order. (Author's collection)

even replace the 1871 pattern. The situation in the 1880s is hard to understand today, particularly as until that time hardly anyone had spared a thought for the infantryman and his burden. Condemned to tote 'Mr Trotter's Knapsack' for over 70 years until a reasonable substitute was issued, the soldier now found himself beset by a

A Kitchener volunteer pictured in late 1914 at a training camp in Britain. He carries the 1903 bandolier equipment in use until stocks of the 1908 and 1914 patterns were sufficient to allow its replacement. Of interest are the obsolete leather gaiters, also pressed into service as a stop-gap. (Author's collection)



multitude of do-gooders all determined to improve his equipment or replace it altogether with their own designs, for which extravagant claims were usually made.

To clarify the situation in the 1880s two points should be made. First, it should be realized that considerable advances had been made in the study and design of infantry equipment on the Continent. The French and Prussian infantryman of the day, in their new and well-designed equipment sets, had put their British counterpart in the position of the poor relation. This, to the Victorian British, intolerable situation probably stimulated the movement to improve the British soldier's equipment more than any other factor. A second and possibly less obvious factor was that of financial reward. The designer of a new equipment could expect a handsome royalty on each set manufactured, patents and official approval permitting. As the 1871 Valise equipment stemmed from the deliberations of a committee no royalties were payable; at least, no documentary evidence exists to the contrary. This was not the case with later sets, and the battle for royalties for the Slade-Wallace equipment, for example, makes interesting reading.

In September 1879 'The Committee on equipment ordered to assemble by HRH the Commander-in-Chief, in order to compare and report on the relative merits of the present regulation valise equipment, that invented by Surgeon-Major Oliver, MD, and that lately brought forward by Lieutenant-Colonel Barrett, commanding 2nd Bn. 19th Regiment' reported their findings.

Much has been written about Oliver's design, although no accurate drawings or photographs are available. The impression given is of a superb, if revolutionary design which was killed off at the design stage because the designer lacked patronage. Perhaps quotation (in part) of the report of the 1879 Committee might redress the balance and give a clearer picture of what befell the Oliver equipment when it was put to the test:

'Having met pursuant to this order—though very much delaying and increasing the committee's work—they have freely discussed in the presence of Lieutenant-Colonel Barrett and Surgeon-Major Oliver the objections to their

equipments, and allowed them the utmost latitude in making alterations, resulting in a form of equipment differing in a considerable content from that originally submitted . . . the so-called "Modified-Barrett Equipment" is nothing more than a modification of the present equipment . . . The [1871] Valise equipment appears to answer fairly well the requirements of the soldier, and with a few slight alterations . . . its retention is recommended till . . . (a) decidedly superior equipment is produced.' This was neither the Oliver nor the Barrett, the committee stated. It positively rejected the Barrett design, and felt that 'the Oliver equipment is an excessively neat equipment, and most ingenious in many of its details, but certain details of its construction do not appear to be practical'. There had been complaints made against the Oliver design by the men who had worn it during the trials, and these had tipped the scales against its continued consideration. After further discourse on the trials the committee went on to recommend that the 1871 Valise equipment be 'adhered to' with the following modifications:

(1) That the valise be made of a more durable material.

(2) That the remainder of the equipment be made of brown leather.

(3) That a smaller mess-tin be introduced.

(4) That the haversack be carried in the valise when practicable.

(5) That the cape (a woollen garment which covered the shoulders and arms down to the level of the elbows) be made lighter and waterproof.

(6) That a new design of ammunition pouches be introduced.

(7) That the ball-bag or expense pouch be withdrawn.

(8) That the shoulders of the 'Kersey frock' or service tunic be 'slightly padded' to afford comfort from the cutting of the braces.

It was from these recommendations that the 1882 Valise equipment developed. The finding suggesting a switch from white buff leather to brown hide was stoutly resisted by the traditionalists, who again argued—successfully—in favour of appearance. (As the 'white buff' lobby were nearly all General Officers there was not



Detail of the 1888 pattern brace buckle. Note how the valise strap secured to the upper section of the buckle.

much of a contest.) The current mess-tin was considered adequate, and the findings of the board were overridden on the grounds of economy. In the case of the suggested waterproof cape the authorities were once again coy, for whatever reasons, and the idea was shelved, as was the suggestion for padding the shoulders of the tunic. The 1882 Valise equipment, described later, was therefore a modification of the 1871 Valise equipment incorporating new ammunition pouches and with the valise repositioned a few inches higher on the back. As most of the work necessary to transform the 1871 pattern into the 1882 pattern could be done at unit level the change-over was effected very much more swiftly than before. The 1882 pattern Valise equipment served on well into the 1890s and was in service for some years after the introduction of the 1888 pattern Valise equipment (the Slade-Wallace), for reasons given later.

No sooner was the 1882 pattern equipment authorized for service than work was in hand to modify or replace it. In 1884 2,000 sets of equipment based on the 1882 pattern but extensively modified were issued to units for troop trials. The 1884 Experimental equipment differed from the 1882 pattern in that the waistbelt was in three pieces and back-adjusting, with six brass loops to

secure the braces instead of the previous two. The braces attached to the belt at these six points instead of the figure-of-eight configuration used previously. The pouches had an inner guard to prevent ammunition loss when the pouch-flap was open; and the valise attached to the braces by means of hooks instead of buckles, and at three points instead of four. A waterproof sheet 30in. by 15in. attached to the valise flap to form a crude groundsheet. The trials that followed showed-amazingly-in favour of the 1882 pattern. The 1884 Experimental pattern equipment was therefore abandoned, but minor modifications to the 1882 pattern resulted from this expensive fiasco giving-one supposes-the impression that all had not been a total waste of time. An interesting point is that during the trials of the 1882/1884 patterns it was once again agreed that a groundsheet/waterproof cape would be a good thing. Even so this long-overdue item was still not approved for general use. (Groundsheets were at the time issued with tentage, to be put beneath bedding.)

Another point worthy of note is that it was at this time that the thorny subject of entrenching tools first arose. The feelings of committee members seemed to be set firmly against anything but a one-piece item, and the several designs of headand-helve breakdown mattock (similar to the item which served for 50 years from 1908) were rejected as impractical. In this respect the author is reminded that the original objection in the US Army to the 1911 automatic pistol (an item still serving today) was that if the soldier lost his magazine the weapon became inoperable. That the British equipment-committee of 1884 felt that the average Tommy could not be trusted with a two-piece mattock is obvious. He was therefore ordered to be issued with a one-piece item which differed not one whit from the sort of tool used for agriculture in the Iron Age. Suspended from the waistbelt in a white buff frog, it immediately drew criticism from the users and their regimental officers who saw it for what it was-an encumbrance, ill-fitted for its intended purpose.

It will be seen from the account of the fate which befell Barrett, Oliver and the perpetrators of the 1884 experiment that the powers-that-be were cautious and conservative, preferring the

existing equipments to the new, and prepared only to modify, never to replace. This situation in no way deterred the equipment entrepreneurs of the 1880s, who bombarded the War Office with a stream of ideas and new designs. Most-but by no means all-of these individuals were military men, and in their ranks were two who were to be responsible for the final pattern of white buff Valise equipment: Messrs Slade and Wallace. Their story is an interesting one, and can be followed from a series of letters written over the period from the launching of their design until well after its acceptance. That they fully understood the prevailing mood is clear from the fact that their design started life as an attempt to modify the existing pattern of equipment. By this means they were able to jump the queue of other hopefuls and, with the help of considerable patronage, got their equipment considered. After skilful infighting, by Colonel Slade in particular, they then managed to get their-by thenentirely new design accepted as a replacement for the 1882 pattern. From this point they fought tenaciously for the royalties they felt to be their due, eventually securing a monopoly over the manufacture of the equipment and a healthy kickback on the sales to Volunteer Regiments. The Slade-Wallace equipment, or, to give it its correct title, the Valise equipment pattern 1888, was the most short-lived of the 19th century equipments. Severe criticism of the Slade-Wallace in the Boer War, 1899-1902, led to its replacement by the 1903 Bandolier equipment. Parts of the Slade-Wallace were then retained for ceremonial purposes; but at most the equipment lasted 15 years in service.

Slade and Wallace met at Aldershot in 1886 when Major Wallace was concerned with the design and trial of 'cartridge carriers'. Colonel Slade, commanding the 2nd Bn. of the Rifle Brigade, expressed an interest in Wallace's work, and said that they should get together over the 1882 pattern Valise equipment and 'make a go' of improving it. This Wallace agreed to do and the pair eventually submitted a modified 1882 pattern set of equipment to the War Office for trials. Colonel Slade then went to work behind the scenes with a letter to the Assistant Director of Artillery. (Incredible though it may seem it

















was the holder of this office who was responsible at the time for the supply of equipment to the infantry!) In his letter Slade casually mentioned that he had shown his equipment to 'General Anderson, Sir Redvers Buller, Colonel G. Clerk, Lord W. Seymour and others. All approve.' Probably as a result of this impressive namedropping, approval was given in November 1886 for the making-up of 600 sets of the Slade-Wallace 1882 modified equipment for trial. After a postal squabble over patents and royalties—the first of many—the trials commenced; or, to be more accurate, they got off to the first false start.

The units detailed to conduct the trials requested sets of equipment made up from new instead of the sets modified from the 1882 pattern. It was at this point that the Director of Artillery decided that the matter was getting out of hand. Responsible as he was for finding the funds for the manufacture of the equipment requested, he decided to put the Quartermaster General's department in the picture regarding the Slade-Wallace trials. He began his letter to the QMG in February 1888 by reminding him of the 1884 experiment and its aftermath, and followed up by pointing out that the following sets were at present undergoing evaluation:

- (1) Colonel Merriam's
- (2) Captain Chichester's
- (3) Major Montagu Stuart-Wortley's
- (4) Surgeon-General Rose's
- (5) Colonel Pease's
- (6) Private Roman's
- (7) Master-Shoemaker Hart's
- (8) Colonel Slade's (pouches for .303in. ammunition)

Was not the situation getting out of hand, he asked? The QMG agreed that it was, and proposed a further equipment sub-committee be set up, presumably to sort out the mess that the equipment trials were getting into. Even so, one hundred sets of the Slade-Wallace 1882 modified equipment remained with the trials units, testing continued, and reports on the equipment began to filter in. These reports contained criticism to which Colonel Slade replied with a curious mixture of guile and bombast. He was prepared to accede gracefully to minor modifications of his design, but pointed out that he and—by nowLieutenant-Colonel Wallace had for many years made an exhaustive study of infantry equipment and therefore knew best!

At this critical point of the story there followed an extraordinary series of letters between the Director of Artillery (by now, no doubt, thoroughly fed up with infantrymen and their confounded equipment) and the Assistant Adjutant General. The subject was the 'approval' of the Slade-Wallace design. Had they or had they not official approval, demanded the Gunner. After several exchanges of ambiguous letters the AAG confirmed in a letter of June 1888 that the Slade-Wallace equipment should be adopted, as the trials ordered by HRH the Commander-in-Chief had been deemed 'satisfactory'. There was nothing more to say. Work was now put in hand to replace the 1882 pattern Valise equipment with the 1888 pattern Valise equipment designed by Colonels Slade and Wallace as and when the former wore out. The first unit to receive the Slade-Wallace equipment was the 1st Bn., Devonshire Regiment in late 1888. In March of 1889 came the first taste of the criticism which the Slade-Wallace would increasingly attract. In a letter to higher authority the commanding officer of the 1st Devons pointed out that discomfort was caused to his men by the heavy greatcoat worn strapped to the rear of the belt. This, like subsequent criticisms, came too late. The Slade-Wallace was officially 'in', and would stay so until the aftermath of the South African War threw up an opportunity to dispose of it.

At the time the 1st Devons' Quartermaster was doling out the new equipment to his men, Colonel Slade and Lieutenant-Colonel Wallace were disposing of a Major Mayne and a Mrs Wardroper (the wife of an army officer), who both claimed that the gallant colonels had pirated their ideas! Foresight over patents by Slade and Wallace helped them to have the Mayne and Wardroper claims overruled; and in the spring of 1889 they were again putting pressure on the War Office for royalties, this time with veiled threats of legal action. After further exchanges of letters which became more and more acrimonious, the Slade-Wallace application for reward was finally referred to the Ordnance Council in December 1889. At the same time the colonels were making

Right-side and left-side view of the 1903 bandolier equipment Marching Order.





Front and rear view of the 1903 bandolier equipment Marching Order.






Detail, 1903 pattern bandolier. (Author's collection)

'preposterous demands' on the government contractor deputed to manufacture the equipment for the Regular Army, in return for the use of their patents to supply Slade-Wallace equipment to Volunteer units. They eventually appointed another contractor to supply the volunteers at a price they set, and at a royalty of 15 per cent. Their letters make fascinating reading.

Thus was the Slade-Wallace equipment accepted into service: a curious story of bluff, bombast, guile and the skilful use of patronage, set against the background of a supply agency with no vested interest in equipment, and a Horse Guards mistrust of the Board of Ordnance going back to Napoleonic times. Considering the exhaustive tests, modifications, committee reports, etc. which led to the acceptance of the 1871 Valise equipment, followed by the stubborn refusal of the authorities to do anything but modify it in the face of fierce competition from new designs, it is remarkable that the Slade-Wallace design gained official acceptance on the strength of trials carried out with 100 modified sets. The harsh criticism made of the Slade-Wallace equipment after the Boer War can only lead to the conclusion that it was an inferior design to the 1882 pattern Valise equipment, which might have served better in South Africa.

It is for the reader to draw his own conclusions as to the motives of Colonels Slade and Wallace in their relentless pursuit of official acceptance for their ideas.

The Valise Equipment, pattern 1882 Description

The equipment set consisted of:

One valise. Two pouches. Two braces (one pair). One waistbelt. One mess-tin and cover. One haversack. One water-bottle and carrier. One 'spade' (when required).

In addition the following supplementary straps were issued: a water-bottle strap, two greatcoat straps and two mess-tin or supporting straps. The valise contained the following:

Reserve ration; oil bottle and grease pot in the side pockets; one spare shirt; the greatcoat; one pair of canvas shoes; spare socks and 'woollen cap'; the holdall containing housewife, pocket ledger, comb, spoon and fork; one bandage (first aid); one flannel belt; one towel and soap; the cape, folded and placed under the valise flap.

To assemble the equipment the bayonet-frog, 'spade'-frog (if required), the water-bottle carrier and the two pouches were slid onto the belt by their loops. The front straps of the braces were then buckled to the brass 'Ds' atop each pouch,

the broad portion of the braces being passed over the shoulders, the braces crossed in the centre of the back and fastened to the upper edge of the valise. (The braces were then adjusted so that the upper edge of the valise was in line with the armpits of the wearer.) The rear ends of the braces were then passed through the brace rings at the front of the wearer in much the same manner as the 1871 Valise equipment, but-unlike the 1871 pattern-they were then passed to, and buckled onto, the bottom of the valise. Thus one single strap, the rear end of the braces, secured both the bottom and the top edges of the valise. (When the valise was not worn these rear ends of the braces were passed through two 'D' rings fastened to the rear of the waistbelt and then secured to the brace rings in front. This necessitated a new design of waistbelt which was adjustable on both sides of the locket-buckle.) When the valise was not worn the rolled greatcoat was strapped to the rear of the belt, with the mess-tin on top, by using the straps mentioned previously. This expedient, it will be noted, was in use before the introduction of the Slade-Wallace equipment. Two other points of interest are the manner in which the

water-bottle and its carrier were attached to the waistbelt on the right-hand side, thus dispensing with the sling; and the manner in which the 'spade' or entrenching tool was attached over and to the bayonet.

The pouches were never intended to contain loose ammunition, and instructions state that ammunition in packets only would be carried in the pouches. When rounds were unwrapped they were ordered to be carried in the coat pocket!

It will be seen that the 1882 pattern Valise equipment, when worn complete, differed only in detail from the 1871 pattern. However, when worn without the valise—which it usually was on active service—it strongly resembled the 1888 pattern which would replace it. (By appreciating this the original intention of Slade and Wallace, i.e. the modification of the 1882 pattern, is easier to understand.)

The basic Sam Browne officer's equipment. Shown are the braces, waistbelt, sword frog, holster and pouch. (Author's collection)



The Valise equipment, pattern 1888 (Slade-Wallace)

Description

The equipment consisted of:

- (1) One valise.
- (2) Two braces (a pair) and a loose brace stud.
- (3) One waistbelt.
- (4) Two pouches.
- (5) One mess-tin with cover.
- (6) One haversack.
- (7) One water-bottle and carrier.
- (8) Two coatstraps.
- (9) One mess-tin strap.
- (10) Frogs for bayonet and entrenching tool.

To assemble the equipment the frogs and pouches were first slid onto the waistbelt. The front straps of the braces were then passed through the 'Ds' on the belt runners (which were positioned between the pouch loops); through the 'Ds' on the 'hindmost' part of the pouches (unless the

Detail, 1903 bandolier equipment greatcoat carrier. (Author's collection)



pouches were full of ammunition, in which case both sets of 'Ds'—there were two—on the pouches were looped up); and back to the double-buckle on the front of the braces, where they were fastened. The spare end of this strap was tucked behind the buckle.

The braces were then crossed at the back and secured where they crossed with a small leather runner. The rear straps of the braces were then passed through the outer of the three buckles on the rear of the waistbelt. The spare ends of the rear brace straps were then fastened around the rolled greatcoat and fastened to the outer of the three buckles. The mess-tin in its cover was then secured above the rolled greatcoat with the messtin strap, which passed through the loops on the cover, the leather loop at the intersection of the braces, and the centre of the three buckles at the back of the belt.

The valise was then fitted by passing its shoulder-straps through the 'Ds' on the broad part of the braces and buckling the ends through the double-buckle above the pouches. If a reserve magazine pouch was worn it was slipped over the left-hand brace just above the pouch.

The main orders for wearing the 1888 Valise equipment were Service Marching Order and Light Service Order, the difference being that the valise was not worn in the latter. The valise was meant to carry the following:

Emergency ration; grease pot; towel and soap; clothes brush; cap, worsted; spare shirt; spare trousers; spare socks; holdall, complete; pocket ledger; spare laces; cape; one pair of drawers, Highland and Scottish Regiments only. (This last item would seem to answer an age-old question!)

During the life of this equipment there were numerous modifications, mainly concerning the pouches, of which there were several patterns. Most were designed to take a combination of ammunition in packets and loose rounds in loops. Apart from the distinctive pouches and braces the main distinguishing feature of the 1888 pattern Valise equipment is the way in which the excessively long rear braces were rolled after passing through the buckles on the rear of the belt, sometimes forming a circle of two to three inches in diameter.



In 1903 'His Majesty's Royal Commission on the War in South Africa' made its report. It had some harsh criticism to make of the infantry equipment in current use. Lord Kitchener is reported to have been concerned over the loss of ammunition from the pouches of his soldiers, a source of supply to the enemy, and ascribes this to 'the unsuitability of articles supplied' in which to carry the ammunition. Sir Charles Warren is quoted as saying that 'the knapsack or valise supplied was an absurdity'. An infantry commanding officer went on record with the comment that 'the accoutrements were cumbersome, heavy and badly balanced'.

A decision was made to replace the Slade-Wallace Valise equipment immediately. In its place a bandolier equipment in brown leather was introduced without the customary reversion to trials, reports, etc. (presumably the lessons of the war were considered sufficient to show up what was required). Whatever the shortcomings of the equipment, there were two enormous advantages in its favour. It was lighter than any previous design, having no knapsack or valise whatsoever, and it was made of the brown leather so long recommended. Thus it was impossible to overload the infantryman with this equipment and, at long last, white buff leather was out after over 200 years of service.

As a regulation equipment the 1903 Bandolier set would only be in service for five years before being replaced by the 1908 pattern web equipment, but it continued in second-line service for many years, and saw active service in Gallipoli in 1915. The bandolier itself remained in service with mounted troops for nearly 40 years, while the belt, frog, belt pouches and sling were still on issue to British infantry battalions in India in the

Detail of Sam Browne items. At left are the frog, holster and pouch; at right are the regulation binoculars and their case. (Author's collection)



1930s. (They were used for guard and ceremonial purposes.) It may therefore be said that the 1903 Bandolier equipment had, in part, a useful life of nearly 40 years.

Description

The equipment consisted of the following:

(1) Waistbelt, a plain brown leather article $2\frac{3}{4}$ in. wide with a plain frame buckle of brass.

(2) Pockets, cartridge. There were two pairs of these, all made of brown leather. One pair contained 15 rounds each and had a brass 'D' at the back for the attachment of the greatcoat carrier shoulder-straps. The second pair contained 10

War artist's impression of an infantry attack on the Somme in the summer of 1916. The pipe-smoking officer with drawn pistol and cane is wearing the Sam Browne holster, pouch and rolled coat. Of interest are the Lewis gun section and the 'bomber'. (Author's collection) rounds each. (All ammunition at the time of the introduction of the 1903 Bandolier equipment was .303in. and was held in five-round chargers.) (3) The bandolier, made of brown leather with five 10-round pockets at the front. There was a brass triangular buckle for regulating size, and a strap for securing the lower end of the bandolier to the waistbelt.

(4) Haversack, a khaki-coloured canvas bag with a webbing shoulder-strap. A small pocket was sewn to the rear edge of the bag to contain the emergency ration. The haversack was intended for the carriage of food only.

(5) Water-bottle and strap.

(6) Mess-tin and cover. The mess-tin was the kidney or 'D'-sectioned article, but the cover was now made of khaki-coloured canvas with two leather keepers to attach the cover to the waist-belt, and a brass 'D' to secure the rear strap of the greatcoat carrier.

(7) Carrier, coat, web. This was a khaki webbing harness with quick-release buckles and it





held the folded greatcoat on the back, being secured there by shoulder-straps fastening to the belt in front and a steadying strap to the rear. Issued with the set were two further plain straps which could be used to secure the rolled greatcoat to the back of the waistbelt in Review Order.

In addition to the items listed a tin in a brown leather cover was carried on the right side of the belt; this contained foot grease (!) and rifle oil.

The equipment was extremely easy to assemble as the pouches, frog and mess-tin simply slid on to the waistbelt. The mess-tin and cover were worn centrally at the rear, the bayonet frog on the left, the 'grease tin' on the right, and the pouches on either side of the buckle with the 10-round pouches nearest the buckle. The belt with all its attachments was put on over the haversack and water-bottle, and the bandolier was then slung from the left shoulder, pouches to the front, the lower end being secured to the waistbelt below the right arm by means of the strap mentioned. The folded greatcoat in its web carrier was now put on the back and secured to the 'Ds' on the front pouches and the mess-tin cover. This was Marching Order.

Review and Drill Order were peacetime variations of the equipment. Review Order consisted of the belt with bayonet and frog and one



10-round pouch, and the rolled greatcoat worn strapped on the rear of the belt. It was worn with the haversack and water-bottle. Drill Order consisted of the belt with bayonet and frog, two 10round pouches and the bandolier. It too was worn with the haversack and water-bottle, and the rolled greatcoat when ordered. All the cartridge pockets had the advantage of a second flap which allowed only one clip of ammunition at a time to be withdrawn, preventing the loss of the second clip.

The main disadvantage of the 1903 Bandolier equipment was the constriction placed on the chest by the bandolier, the haversack strap and the water-bottle strap. The arrival on the scene of a vastly superior design in the shape of the Mills-Burrowes webbing equipment showed up this and other disadvantages, and the War Office were quick to replace the 1903 pattern with what was probably at the time the best equipment design in the world, the 1908 pattern Infantry Web Equipment (see companion Men-at-Arms title, British Infantry Equipments 1908–80).





During the early 19th century, and in the Napoleonic Wars in particular, officers campaigned and fought in much the same uniform and accoutrements as they wore in barracks. Evidence does exist to show that infantry officers on foot carried haversacks and flasks in the field, as well as telescopes and pistols; but these instances were rare, and the battalion officer normally marched and fought armed only with a sword and a belt from which to wear it. The most common of these was the baldric-type shoulderbelt with a frog for the scabbard, but Light Infantry officers wore a version of this with slings, as well as waistbelts with slings. (The waistbelt with a frog was rarely seen in British service.) Peacetime regulations ensured that regimental officers were dressed and equipped uniformly in garrison and at the start of a campaign; but protracted campaigning-particularly in the Peninsula-led to the breakdown of uniformity and, as in the 8th Army in the Second World War, practicality and personal preference in dress led to individual styles, and even to eccentricity. Once back to peacetime soldiering, however, uniformity and adherence to regulations re-introduced the shoulder-belt, which held sway until the mid-19th century.

After the Crimean War the sling-belt—a waistbelt with the sword attached by means of two slings—became regulation for infantry officers, but it was to be a ceremonial item only, as the movement towards a separate uniform and equipment for the field had begun. The British

'Arf a mo', Kaiser!'—the irrepressible Tommy. This shows the 1903 bandolier being worn well into the 1914–18 War by mounted troops. (Author's collection) Army had fought its last war in full dress (although not its last in scarlet), and officers were looking for a more practical form of dress for the field. At first the sling-belt served, usually in brown or black leather. To this could be attached holsters or pistol-cases for the revolvers which officers were purchasing in increasing numbers as they became more reliable.

But the sling-belt was not the perfect answer to the carriage of sword and revolver. Fastening with a locket-buckle or a snake-clasp, they were difficult to adjust and, as the slings were designed originally to suspend a sword comfortably whilst mounted, the slings were rarely used, the sword nearly always being hooked up to the belt. (In this position it hung somewhat uncomfortably with the hilt either forward or to the rear of the armpit.) Ideal though the sling-belt may have been for the carriage of a sword alone, the increased weight of a large-calibre revolver and ammunition put undue strain on the waist and hips. Clearly something better was needed, and this was found in the Sam Browne belt.

Mention has already been made of Sam Browne and the disability which led to his invention. The appearance of his harness in the 1860s led to its widespread adoption by officers, who instantly recognized a better way of carrying a sword and revolver. Other advantages were the shoulder-braces to spread the load evenly, and a quickly adjustable frame buckle. At first the pistol and sword were the only items carried on the Sam Browne belt, but in time a purpose-designed haversack appeared which snapped on to the sword-frog 'Ds', and pouches for pistol ammunition, compasses and binoculars were made to be attached to the belt. Eventually the Sam Browne equipment became regulation for officers, and was incorporated into dress regulations to be bought by all officers on commissioning. As well as the items mentioned, the complete set included a canteen and a set of greatcoat straps and sling.

The Sam Browne equipment was to continue as regulation for infantry officers up to the adoption of the 1937 pattern web equipment, when it was replaced by the officer's set described in *British Infantry Equipments 1908–80*. However, the Sam Browne set fell into disuse during the Great War of 1914–18, when company officers preferred to wear the 1908 web equipment with the pistol attachments. In this order they were less obvious to snipers. But the Sam Browne belt worn by itself with a single diagonal brace became, more than any other badge or distinction, the mark of an officer when out of the line. When in 1939 battledress relegated service dress for officers to a semi-ceremonial category, the Sam Browne belt was retained and, in this capacity, it remains in service today, unchanged after 120 years of service.



A: Knapsack equipment, 1815

(1) A private soldier of the 71st Highland Light Infantry (Adam's Brigade, Clinton's Division), as he would have appeared on the field of Waterloo, 18 June 1815. Turning to face an attacking French cavalryman, he displays the rear of the knapsack equipment of the time. Note the envelope knapsack—the forerunner of the 'Trotter'—the dish mess-tin and the 'Italian' canteen.

(2) A typical cross-belt plate of the period (50th Foot, other ranks). Note the way in which tangs secured the belt.

(3) Musket sling details. The sling was tied-off to the trigger-guard swivel, having buckled through the tailpipe swivel.

(4) Types of frog detail on cross-belts.

(5) Detail of knapsack strap. The spare strap was rolled for neatness after pushing it twice through the buckle runner.

(6) Canteen neck and stopper.

B: Rifle Regiment equipment, 1812

(1) A corporal of the 2nd Battalion, 95th Rifles

loads his Baker rifle in the saps at Badajoz. His knapsack is for once dumped, and his canteen and haversack have been removed to aid more accurate shooting. Note the powder flask for priming, the picker and brush for cleaning his rifle's touch-hole, and the sword-bayonet minus its knucklebow.

(2) Detail of picker and brush.

(3) Waistbelt clasp detail.

(4) Inside aspect of waistbelt with adjusting slide.

(5) Detail of flask cord loop.

(6) Detail of second pattern Baker rifle swordbayonet, scabbard and frog. Inset is the first pattern bayonet, with the weaker points arrowed. Contemporary pictures often show the first pattern bayonet with a simple quillon arrangement, the knucklebow having been removed.(7) Detail of the rifle sling buckle.

C: Knapsack equipment, 1854

(1) A typical infantry private in the improvised winter clothing seen in contemporary photographs of the Crimea. Knapsacks were not worn in the trenches before Sevastopol, and our subject is shown without his. Note the recently issued waistbelt, which replaced the cross-belt worn right up to the outbreak of the Crimean War; the cap pouch, and the expense pouch worn on the belt.

(2) Cap pouch detail.

(3) Detail of haversack sling, slide and runner.

(4) Expense pouch detail.

- (5) Bayonet-frog detail.
- (6) Locket-buckle detail.

(7) Rifle sling detail.

D: Valise equipment, pattern 1871

(1) Waistbelt with bayonet-frog attached. Note that the left-hand 'D' is extended while the other is pushed into its recess.

- (2) First type of pouch.
- (3) Second type of pouch.
- (4) Arrangement of the braces. Note the stud

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Sir H. Horne, commanding 1st Army on the Western Front in 1916, pictured with two members of his staff. All wear the Sam Browne belt with a single diagonal brace. (Author's collection)



securing the braces where they cross, the greatcoat straps passed through their loops in the braces, and the upper valise buckles.

(5) Sergeant, 2nd Battalion, 24th (2nd Warwickshire) Regiment of Foot; South Africa, 1879. He is shown wearing his valise, although this was rarely worn on campaign in the Zulu War.

(6) Rear view of a private of the 24th in Full Marching Order. Note the position of the glengarry cap and the mess-tin. In Light Marching Order the ammunition bag, normally worn

Trench scene, Salonika, 1916. Two of the officers in the foreground wear the Sam Browne belt with the single braces, while the captain at left carries only the binoculars from the set. (Author's collection) suspended from the right brace ring, would be hung from the intersection of the braces, and the mess-tin would be carried between the coat straps.

E: Valise equipment, pattern 1882

(1) A private of the 1st Battalion, Royal West Kent Regiment on the North-West Frontier of India in 1898. Although the 1888 Slade-Wallace equipment had officially replaced the 1882 pattern Valise equipment the 1st Royal West Kents had yet to receive it, and soldiered on with the 1882 set. The uniform details of our subject are from contemporary photographs, including the unbecoming local 'balaclava' headgear. Note that he carries no valise.



(2) Waistbelt and brace detail when valise not worn.

(3) Pouch detail.

(4) Rear view of private soldier on home service in Full Marching Order.

F: Valise equipment, pattern 1888 (Slade-Wallace)

(1) Sergeant, 2nd Battalion, The Rifle Brigade; Sudan, 1896. The tradition of black leather equipment for Rifle Regiments was maintained from the formation of the Rifles until the introduction of the 1903 Bandolier equipment. The 1888 pattern was, therefore, the last equipment made up in black for the Rifles. Note the black haversacks, one of which is carried in place of the valise.

- (2) Waistbelt and brace detail.
- (3) Pouch detail.

(4) Rear view of a private of the King's Own in Malta in the 1890s, wearing Full Marching Order.

G: 1903 Bandolier equipment

(1) Corporal, 5th Battalion, The Lancashire Fusiliers; Egypt, 1915. Like many Territorial battalions of the time, and like many other units which took part in the Gallipoli expedition, the 5th LFs were equipped with the 1903 Bandolier equipment. Note the circular pattern waterbottle and the method of attaching the bandolier to the waistbelt.

(2) Detail of second flap for pouches.

(3) Detail of mess-tin cover.

(4) Detail of greatcoat carrier quick-release buckles and hooks.

(5) Detail of bandolier buckle.

(6) Detail of waistbelt buckle.

(7) Detail of emergency ration pocket on haver-sack.

H: Officers' equipment

(1) Lieutenant-colonel, 2nd Battalion, The Gloucestershire Regiment; England, 1905. The colonel wears the pattern of service dress introduced just after the South African War. His medal ribbons are those of the Distinguished Service Order and the Queen's and King's South Africa Medals. Field officers, who rode on the march, wore field boots, breeches and spurs; and our subject wears the 1900 regulation Sam Browne set including pistol case, pouch, binoculars, water-bottle, haversack and sword. He is not wearing the rolled and slung greatcoat. Note the small strap for securing the hilt of the sword.

(2) Detail of greatcoat with straps and sling.

- (3) Water-bottle detail.
- (4) Types of haversack.
- (5) Buckle details.

The 'D' or kidney-section mess-tin in use over the whole period covered by this book.



Notes sur les planches en couleur

Ar Un soldat du 71st Regiment of Foot, Waterloo, 1815. Le shako de style ancien était un emblème distinctif de ce régiment. Ici, l'equipement est vu de derrière; notez le sac à dos en forme 'd'enveloppe'. A2-A6 Détail de la plaque des bandoulières; bretelle de mousquet; porte-baïonnette; sangle pour sac à dos; gamelle.

B1 Un caporal du 2nd Bn. 95th Rifles, Espagne, 1812, portant l'équipement en cuir noir utilisé par ce genre d'unité et armé du fusil Baker. **B2–B7** Détails de ceintures et d'équipements; la baïonnette Baker est souvent illustrée dans des estampes contemporaines sans le protège-doigts, qui n'y était que faiblement attaché.

CI Soldat d'infanterie typique de la Guerre de la Crimée en 1854, portant une tenue d'hiver improvisée. C2-C7 Détails de ceintures, de poches, porte baïonnette et boucle.

D5 Sergeant, 2nd Bn. 24th Foot, Zululand, 1879, portant l'équipement Valise de 1871. **D6** Soldat ordinaire de la même unité montrant l'équipement vu de dos; notez le bonnet Glengarry. **D1–D4** Détails de la ceinture; poche, premier modèle; poche, deuxième modèle; disposition des attaches d'épaules.

E^I Soldat du 1st Bn. Royal West Kent Regiment, frontière nord-ouest de l'Inde, 1898, portant l'équipement Valise de 1882; la valise elle-même n'est pas portée ici. **E**₂-**E**₄ Détail de la ceinture et des attaches d'épaules qui sont visibles lorsque la valise n'est pas portée; vue de derrière d'un soldat en tenue complète de marche pour le service domestique.

F1 Sergeant, 2nd Bn. The Rifle Brigade, Soudan, 1896, portant l'équipement Slade-Wallace en cuir noir distribué à ce régiment en 1888. Un des sacs à dos est porté à la place de la valise réglementaire. F2, F3 Détail de la ceinture, attache d'épaule, poche. F4 Soldat, King's Own Regiment, Malte, pendant les années 1890, en tenue complète de marche.

GI Corporal, 5th Bn. The Lancashire Fusiliers, Egypte, 1915, portant l'équipement Bandolier de 1903—que de nombreuses unités utilisaient encore au Moyen Orient à cette époque. G2-G7 Détails de rabats de sacoches; housse pour gamelle; bandoulière et boucles de ceintures; poche à provisions sur le sac à dos.

HI Lieutenant-Colonel, and Bn. The Gloucestershire Regiment, Angleterre, 1905. Il porte l'équipement 'Sam Browne' distribué aux officiers en 1900; la tenue de service introduite après la guerre des Boers; une culotte et des bottes de cheval. H2-H5 Détails du manteau muni de sangles qui pouvaient être attachées à cet équipement; gourde; modèles de sacs à dos; boucles.

Farbtafeln

Ar Ein Soldat des 71st Regiment of Foot, Waterloo, 1815. Das besondere Schako war eine regimentale Unterscheidung. Die Rückansicht der Ausrüstung ist gezeigt, bemerke den Tornister im 'Umschlag' Stil. A2-A6 Einzelansicht einer Kreuzkoppelplatte; Musketenschlaufe; Bajonetthalterung; Tornisterriemen; und Feldflasche.

Br Ein Obergefreiter des and Bn., 95th Rifles, Spanien, 1812, die schwarze Lederausrüstung tragend, die von dieser Einheitsart getragen wurde und bewaffnet mit dem 'Baker' Gewehr. **B2–B7** Detaillierte Ansicht von Koppeln und Ausrüstung; das 'Baker' Bajonett ist in gegenwärtigen Darstellungen oft ohne Knöchelschutz, der nicht sehr gut befestigt war, illustriert.

CI Typischer Infanteriesoldat des Krimkrieges, 1854, in improvisierter Winterkleidung. C2-C7 Genaue Ansichten des Koppelzeugs, Taschen, Bajonetthalterung und Schliesse.

D5 Sergeant, and Bn., 24th Foot, Zululand, 1879, 1871er Valise Ausrüstung tragend. **D6** Ein einfacher Soldat derselben Einheit, die Rückseite der Ausrüstung zeigend, mit der Glengarry Mütze. **D1-D4** Detailansicht der Koppel; erstes Muster der Tasche; zweites Muster der Tasche; und Anordnung der Schulterriemen.

Er Einfacher Soldat, 1st Bn., Royal West Kent Regiment, Nordwestgrenze von Indien, 1898, eine 1882er Valise Ausrüstung tragend; die Valise selbst ist hier nicht getragen. **E2-E4** Einzelansichten der Koppel und Schulterriemen, wenn die Valise nicht getragen wird; Tasche; und Rückansicht eines Soldats in Home Service Full Marching Order.

F1 Sergeant, 2nd Bn., The Rifle Brigade, Sudan 1896, die 1888er Slade-Wallace Ausrüstung in schwarzem Leder dieses Regiments tragend. Einer der Tornister wird anstelle der angeordneten Valise getragen. F2, F3 Einzelausschnitte von Koppel, Schulterriemen und Tasche. F4 Einfacher Soldat, King's Own Regiment, Malta, in den 1890ern, volle Marschausrüstung tragend.

GI Corporal, 5th Bn., The Lancashire Fusiliers, Egypten, 1915, die 1903er Bandolier Ausrüstungsgegenstände tragend-zu dieser Zeit immer noch bei vielen Einheiten im Mittleren Osten benutzt. G2-G7 Detailansicht der Gürteltaschenüberschläge; Essgeschirrdeckel; Riemen zum Tragen des Ubermantels; Patronengurt- und Koppelschliessen; und Feldrationstasche.

H1 Lieutenant-colonel, 2nd Bn., The Gloucestershire Regiment, England, 1905. Er trägt 1900er 'Sam Browne' Offiziers-Ausrüstungsgegenstände; die Dienstuniform war nach dem Burenkrieg eingeführt; und Reithosen und Stiefel zum Reiten. H2-H5 Ausschnitte des Ubermantels mit Befestigungsriemen, der dieser Ausrüstung beigefügt werden konnte; Wasserflasche; Muster von Tornistern; und Schliessen.

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