U.S. ARMY FIELD MESS GEAR



DAVID C. COLE

U.S. ARMY FIELD MESS GEAR

DAVID C. COLE

Contents

1. Haversacks & Field Packs	Page 1
2. Canteens	Page 10
3. Canteen Covers	Page 21
4. Cups	Page 27
5. Trenchers, Plates and Meat Cans	Page 31
6. Utensils	Page 36
7. Miscellaneous Items	Page 43

1. Haversacks & Field Packs

The term "haversack" comes from the 17th century Low German word "hafersach" meaning "a cavalry trooper's bag for horse provender," literally an "oat sack." By the mid-18th century the French were using the word "havresac" to mean "a single strapped bag worn over one shoulder and used for carrying rations." This term came over into English with the same meaning (*Online Etymology Dictionary*). Prior to 1851 haversacks were made of white linen in a variety of forms and sizes.



Above (left), early 19th century haversack, and (right) a haversack from the period of the Mexican War

Prior to 1851 haversacks were made of white linen in a variety of forms and sizes.



The 1851 Haversack circa 1863

Beginning in 1851 haversacks became black. The white linen was painted and sealed with linseed oil. The bag was approximately thirteen inches across and eleven inches deep, and had a top flap secured by a small leather strap and buckle arrangement in front. Inside there was a separate white cotton or linen bag used to hold the soldier's rations. It was held in place by three buttons so that it could be removed and laundered on occasions. This pattern haversack continued in general use until the late 1870s.



Above is the 1874 haversack (type 1) with black rubberized flap and the 1874 haversack (type 2) with the drab canvas flap, both had a web shoulder strap with Chambers Buckle

Following the Civil War, the Army experimented with brace systems in 1872 and 1874. Although the system itself was a failure, the haversack for the 1874 Palmer Brace System, continued in use. The bag was made of drab duck canvas with brown leather buckle chapes on the upper rear corners, and a permanently attached web sling with a Chambers buckle. At the bottom of the back was a brown leather strap for connecting to the clothing bag when worn as part of the brace system. The flap was made of black rubberized canvas. On the front of the bag, covered by the outer flap, was a pocket for the meat can. Inside, the bag was divided into two compartments. There was a utensil pocket on each side with a brown leather scabbards for the knife and fork to protect the bag from damage.

In the fall of 1877 the Army modified the haversack by replacing all of the leather items with canvas, and replacing the rubberized flap with a double canvas one with a compartment for the meat can. The principle manufacturer was: Watervliet Arsenal



An 1878 haversack marked for Company C, 2nd U.S. Infantry soldier No. 39. The back view shows the method of attaching the haversack strap to the D-rings of the bag with brass hooks.

The Infantry Board of 1878 adopted a haversack pattern that would continue in use into the 20th century. The bag was made of drab duck canvas with D-rings on the upper corners of the back and a 12 inch by 14 inch flap on the front. Inside, the bag was divided into three compartments,



1874 utensil scabbards and 1878 condiment bags as issued with the 1878 haversack

with a pocket on the front designed to hold the 1874 meat can. There was a utensil pocket on each side with a brown leather scabbard for the fork and another for the knife to protect the bag from damage. In addition there were two white canvas drawstring bags to hold condiments.

M new shoulder sling was introduced that was made of black leather 56 inch long by two-inches wide at the center tapering to one and one-eighth inches wide near each end. Each end of the sling was doubled back through the loop of a two-inch long brass wire hook and a leather keeper. It was then secured by a small brass hook,

pin fastened to the end that was secured through one of five holes spaced evenly near each end of the sling. The sling could then be attached by the large hooks to the D-rings on the back. The principle manufacturer was: Rock Island Arsenal.

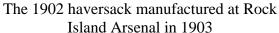
As a result of experience gained during the Spanish-American War, the haversack specifications were changed in 1898 to increase the size of the bag. The principle manufacturers were: Rock Island Arsenal; and the U.S. Post Office Canvas Shop, Washington, D.C.



A comparison of the 1878 haversack and the 1898 haversack showing the increase in size

Beginning in 1903, the Army began looking at equipment to go with the cartridge belt for the M-1903 rifle. The haversack remained essentially the same, but the D-rings on the back were changed spring clips that were used to attach the haversack directly to grommets on the cartridge belt. Older haversacks were modified by the addition of an S-hook to the D-ring. A delay in the production of the rifle resulted in a delay in the issue of equipment until 1906. All of the equipment including the haversack was refined in 1907. The principle manufacturer was: Rock Island Arsenal.







The 1907 haversack manufactured at Rock Island Arsenal in 1908



The back of the haversack showing the spring clips used to attach the haversack to the cartridge belt

As a result of the work of the Infantry Equipment Board that met at Rock Island Arsenal in 1909, and entirely new set of equipment was adopted by the Army known as the Model 1910. The haversack, rather than being worn at the side, now became the upper portion of the pack and was worn on the back. The principle manufacturer prior to World War I was: Rock Island Arsenal.

The M-1910 haversack was made of olive drab canvas. It has web shoulders straps that attacked to the cartridge or pistol belt by metal spring clips. Instead of a bag, the body of the haversack consisted of a bottom flap with a strip of webbing up the center stitched to form a series of loops. This flap was folded up and two side flaps folded across and were secured by web straps held by frame buckles. The top flap was then folded down and secured by a single web strap to a metal buckle. Attached to the bottom of the haversack was a removable pack extender that held less essential items. The pack could be dropped before an engagement to lighten the soldier's load.



The M-1910 haversack (1st pattern 1910) with rounded meat can pouch, and the M-1910 haversack (2nd pattern) with the square meat can pouch.

The soldier's field rations were carried in the haversack along with other essential items. The meat can, knife, fork and spoon were carried in a canvas pouch that was attached to the top center of the haversack flap. The earliest version of the meat can pouch had a rounded bottom and was laced to the flap, but this was quickly changed to a somewhat larger pouch with a squared bottom that was held to the flap by four metal loops that passed through slits in the flap and were secured by two web straps.



The M-1928 haversack with strap securing flap of the meat can pouch

Although some slight production changes were instituted during World War I, the M-1910 haversack remained in used until World War II. An upgraded haversack was developed in 1928 that had quick release buckles and a web strap and buckle closure on the meat can pouch

replacing the metal button. However, the M-1928 haversack did not go into production until 1940, and older haversacks continued to be issued until stocks were exhausted.

Some of the known manufactures include: A. Beif & Co.; Atlas Mfg. Co.; Baker-Lockwood Mfg. Co., Inc.; B.B.S. Co.; Boyt; Crawford-Austin Mfg. Co.; G & R Co.; Hamilton Scheu & Walsh Shoe Co.; Indianapolis Tent & Awning Co.; Laird Schuber Co.; Langdon Tent & Awning Co.; and Ruberto.



The M-1936 Field Bag

In 1936 the Army introduced a canvas field bag for use by officers and mounted personnel. The bag was a copy of the British officer's musette bag used during World War I. Rather than having shoulder straps, the bag could be attached to a set of cotton web suspenders, or carried by a single general purpose shoulder strap. Like the haversack, the field bag was intended to carry rations, mess gear, and other essential items needed by the soldier. It was felt that a larger pack was not needed since less essential could be carried on a vehicle.

Some of the known manufactures include: Atlantic Products Corp.; B.B.S. Co.; Bearse Mfg. Co.; Bradford; Byer Mfg. Co.; Copley Shoe Co.; Crawford Mfg. Co., Inc.; Fox Mfg. Co.; The Langford Tent & Awning Co.; Kadin-Luce Mfg. Co.; Scholnick Shoe Co. Corp.; Standard Garment Co.; Powers & Co.; Protection Products Co.; and the V.C. Co.

In 1944, the Army began replacing the haversack and the canvas field bag with a combat pack based upon the US Marine Corps 1941 pack. Sometimes the two can be confused. The new pack was made of cotton canvas in olive drab shade 7, a darker shade of olive drab than what was previously used. Like the canvas field pack, the combat pack was attached to a separate set of equipment suspenders. It had a waterproof liner, interior divisions, and numerous straps for closing the main flap, for attaching a blanket roll, and for attaching the cargo pack. There was a canvas flap with eyelets in the center of the flap for attaching the entrenching tool cover, and another on the side for attaching the bayonet scabbard.



The M-1945 combat pack

Short comings on the M-1944 pack were quickly upgraded and in February 1945 it was replaced by the M-1945 combat pack. It should be noted that the combat and cargo packs of the two models are not interchangeable. The quick release buckles of the M-1944 packs will not work with the double-bar buckles used with the M-1945 version. The M-1945 pack system was used until finally replaced by the M-1956 equipment in the early 1960s.

An entirely new set of individual equipment was introduced by the Army in 1956. The M-1956 canvas field (butt) pack made of olive green shade 7 cotton duck was included as part of the set.



The M-1956 (left) and the M-1961 (right) field packs (butt packs).

Like its predecessors, this bag was designed to carry rations, mess gear, and other essential items needed in combat. It consisted of a bag with a large outer flap with a carrying handle on top and a plastic window for inserting a name card. On the side of the flap was a series of eyelets for attaching items with 1910 type double belt hooks. The side of the bag had webbing stitched to form loops to hold equipment with the 1956 pattern slide fasteners. The back of the bag had two such fasteners to attach it to the equipment belt. There were also two tabs, each with a metal grommet for attaching the clips of the combat suspenders.

An improved version of the pack, known as the M-1961, was very similar, but included a rubberized throat liner inside. The M-1956/1961 field packs were the last of the Army's general issue packs specifically designed to hold rations and field mess equipment. A nylon version of the field pack was standardized in 1967 but saw very little use.

2. Canteens

The term canteen comes from the French word "cantine" meaning "a sutler's shop, a storage vault or a storage corner," and other similar meanings now obsolete. The term was extended to mean a "refreshment room," and by 1744 it came to designate a "small container for water carried by solders on the march." This term came over into English as the word "canteen" with the same meaning. (*Online Etymology Dictionary*)



A wood barrel-type canteen with linen sling used in the late 18th and early 19th centuries



A wood cheese-box type canteen with a leather sling used at the time of the War of 1812



A British tin water bottle with a woven cord sling also used by American troops during the Revolutionary War

Prior to 1858 canteen were made of wood or tin and came in a variety of forms and sizes. The two most prominent being the "barrel-type" made of wood with side slats like a barrel, and the "cheesebox-type" made of wood with a single wrap around side. Tin water bottles, similar to that used by the British Army, were also used, particularly towards the end of the 18th century.

In 1858, a new standardized canteen was authorized and the Philadelphia Quartermaster Depot contracted with Albert Dorft of Philadelphia to produce the new item. The canteen was made of tinned iron, covered in sky-blue wool kersey, with a white linen shoulder sling. Coinciding with the start of the Civil War (April 1861), an improved version of the canteen was introduced. Known as the "bull's-eye" canteen, it had concentric circles embossed in the sides to add additional strength. Both patterns were produced for the Army throughout the war.



Above are examples of three Civil War period U.S. Army canteens. On the left is a bull's-eye canteen produced by Albert Dorft for the Philadelphia Quartermaster Depot (note the sky blue wool cover and the cord securing the stopper); the center canteen has smooth sides and a gray jean cloth cover and was produced by the New York Quartermaster Depot (the stopper is secured by a chain attached to a hole in one of the upper sling guide); the third canteen, produced by the Cincinnati Quartermaster Depot, also has smooth sides and is covered in course brown wool (the stopper is secured by a chain but the sling guide does not have a hole, also the sling has a Cincinnati Depot inspection stamp). Some Civil War period canteens will have contractor information stamped into the side of the spout. In 1872 the pattern 1858 canteen was improved with a brass stopper chain attached to a brass wire loop around the neck replacing the original iron chain.

The Army experimented with brace systems in 1872 and 1874. Although the system itself was a failure, the canteen for the 1874 Palmer Brace System in modified form continued in use. The original 1874 canteen (type 1) was nothing more than an existing Civil War period canteen with a double wool cover in brown or sky-blue, a web sling with a brass Chambers buckle, and the 1872 modification to the stopper chain. The 1874 canteen (type 2), introduced about 1876, had a brown cotton canvas cover and the lower sling guide was removed to allow the cover to fit better. Variations to the 1874 canteen include leather welts in the seam of the cover, and the bottom sling guide not being removed.



1874 canteen (type 2) with brown canvas cover

The Infantry Equipment Board of 1878 further modified the pattern 1858 canteen by removal of the bottom sling guide and the addition of triangular iron wire loops to the upper guides. The body of the canteen was recovered in a layer of Petersham cloth for insulation, with an outer cover of drab cotton canvas.

A new shoulder sling was introduced made of black leather one-inch wide by 56 inches in length. Each end of the sling was doubled back through the loop of a two-inch long brass wire hook and a leather keeper. It was then secured by a small brass hook, pin fastened to the end that was secured through one of five holes spaced evenly near each end of the sling. The sling was then attached by the large brass hooks to the triangular loops of the canteen. This pattern of canteen would continue in use well into the 20th century. The principle manufacturer was: Rock Island Arsenal.



The 1878 canteen and shoulder sling

Stocks of Civil War period canteens were exhausted by the end of the Spanish-American War and the bodies for 1878 canteen were being newly manufactured. In 1902, a modification was made to the canteen body by the addition of a convex depression on the backside so that it would fit more snuggly against the wearer. In addition the leather canteen sling was eliminated and the haversack sling became the universal pattern sling for both the canteen and the haversack.



The 1902 pattern canteen, marked "Rock Island Arsenal/ 1903" showing both the front and rear views. Note the convex depression on the back.

In the mean while, experimenting with new field equipment was underway. In 1903 it was decided to replace the shoulder sling for the canteen with a smaller V-shaped sling made of drab cotton web with a simple hook arrangement on each end to hold the canteen, and a spring clip in the center to secure the canteen to the cartridge belt.



The 1903 pattern canteen sling used with the 1903 and later the 1907 cartridge belt, and a detail showing the method of attachment to the cartridge belt

The 1909 Infantry Equipment Board introduced a completely new set of field equipment. The board had 300 sheet tinned steel canteens and cups manufactured by Rock Island Arsenal,



and 500 aluminum canteens and cups manufactured by The Aluminum Goods Manufacturing Company (A.G.M. Co.), sent out for trial in 1909. A.G.M held a patent for the process of manufacturing one-piece (seamless) aluminum products. In 1910 the board decided to adopt the aluminum canteen and the first production canteens were made by A.G.M. Co. in sets with the cups.

Left: An M-1910 unmarked A.G.M. Co. canteens of seamless manufacture as first manufactured for issue. It has all aluminum construction except the chain which is made of corossionless German Silver.

In 1911 the Army began searching for a method of manufacturing canteens that would not require paying royalties to A.G.M. for the patented "spinning" process of making seamless aluminum canteens. By 1912 Rock Island Arsenal had developed a satisfactory technique of welding aluminum and went into production. The welded canteens were made in two halves that were welded together around the outer edge.

It should be noted that during the period from 1913 to 1917, the Aluminum Goods Manufacturing Co. manufactured canteens with German silver necks, chains, shackles and sliding loops identical to the first canteens manufactured by Rock Island Arsenal, but with the same cap as on the earlier canteens. Some of these canteens were purchased on state contracts and were used by National Guard units.



Above are two welded, unmarked, 1912 Rock Island Arsenal manufactured canteens with improved German silver neck, sliding ring, shackle and chain. The early RIA caps were similar to those manufactured by the A.G.M. Co., but the caps are slightly larger and have cross checked knurling in a band at the top. The canteen on the right has an improved cap with full knurling on the side, but still flat on the top.



1912-13 Detail of caps on unmarked R.I.A. canteens.

In 1914 Rock Island eliminated the neck ring and replaced it with an improved neck with a lug which secured the cap chain with a small pin. In addition, a new cap was added with a domed top and knurled side.



An unmarked, welded, Rock Island Arsenal manufactured aluminum canteen with the 1914 cap and neck improvements

During Word War I, the Quartermaster Corps assumed responsibility for individual equipment including canteens. In 1918 the Quartermaster Corps contracted for canteens to be manufactured by five domestic companies. These canteens were manufactured using the specifications that Rock Island Arsenal had developed for the welded body with the 1914 cap and neck improvements. In addition, the aluminum was treated during the manufacturing process to reduce reflection. The known World War I manufacturers of M-1910 canteens include: The Aluminum Company of America (ACA); Aluminum Goods Manufacturing Co. (AGM Co); Buckeye Aluminum Co. (BA Co.); J. W. Brown Co. (J.W.B); Landers, Frary & Clark (L F & C).

Beginnings in 1942 canteens were manufactured of alternate materials to substitute for aluminum. Porcelain plated canteen were made in 1942 only; plastic canteens were made from 1942 to 1944, and corrosive resistant steel canteens were made from 1942 to 1945. A black resin plastic (Bakelite) canteen cap was specified and assembled on all production canteens, the first pattern having a flat top, and the second pattern with a recessed top (beginning in 1943).



Canteens produced in alternative materials under specifications developed in 1942 included from left to right: porcelain, plastic, and corrosive resistant steel

In late 1942 aluminum was released by the War Production Board for the manufacture of canteens. The first aluminum canteens produced were manufactured by companies that had been involved with manufacture of the 1942 corrosive resistant steel canteen and were therefore produced with a horizontal seam. The more traditional welded canteen with the side seam went into production beginning in 1943.





Seen above (left), is the horizontal seam aluminum canteen produced from 1942 to 1945, and (right) the side seam aluminum canteen produced from 1943 to 1945

Some of the known manufactures of canteens during World War II include: Aluminum Goods Manufacturing Co. (AGM Co); Buckeye Aluminum Co. (BA Co.); Fletcher Enameling Co. (F.E. Co.); Landers, Frary & Clark (L F & C).; REP Co.; Republic Stamping and Enameling Co. (R.S.E. Co.); Southeastern Metals Co. (S.M.Co.); United States Steel Corp. (U.S.S. Corp.); Vollrath; and Vogt.

Following World War II aluminum and corrosive resistant steel canteens continued in use. In 1952 a canteen made in a slightly larger size was produced by Mirro Corp. (formerly the Aluminum Goods Manufacturing Co.) and is the last of the M-1910 production canteens. It was produced from 1951 to 1954, and again from 1962 to 1963.



Above (left), the slightly larger aluminum canteen (950cc) produced by Mirro Corp. beginning in 1952.

After considerable experimentation, a one quarter canteen made of olive drab polyethylene and designated the M-1961 became Army standard in September of 1962, replacing the aluminum and stainless steel canteens which continued in use as secondary standard until the early 1970s. In 1966 the M-17A1 protective mask was introduced which had a drinking tube. The cap of the 1961 canteen was changed by the addition of a small connecting hole in the center of the cap with a cover that snapped into place. Replacement covers were issued for older canteen then in use.





The M-1961 plastic canteen (above left) was manufactured by ABCOM in 1964, and the M-1961 canteen with type 2 cover (above right) was produced by SKILCRAFT in 2004.







The vinyl two quart canteen (above left) was manufactured by King's Point Industries, Inc. in 1966; the olive green canteen was manufactured by Hedwin in 1968, and the desert tan canteen was manufactured in 1990. Both the olive Green and the tan canteens were used in Operation Desert Storm in 1991.

In 1966 a two quart canteen was developed at the request of the Special Forces serving in Vietnam. It consisted of a square molded vinyl bladder with a threaded spout centered on the top and a pattern 1942 black resin plastic cap. The heat sealed seams proved to be too weak for the rugged conditions found in Vietnam. In 1967 a two quart molded plastic canteen was field tested by the 4th Infantry Division. The new canteen was olive green in color with the spout located in one corner. The cap was the same as that used on the one quart canteen. The new canteen became standard in October 1968 with general production beginning in 1969. In 1991 general issue of this canteen, in both olive green and desert tan, was made to troops serving in the Persian Gulf area.



The collapsible one quart canteen

Beginning in 2007 a collapsible version of the M-1961 canteen began being phased into use. This is a one quart canteen made of heavyweight soft plastic. The air can be squeezed out as water is consumed, which reduces the noise, and when the canteen is empty it can be collapsed and stored it the rucksack. The collapsible canteen improves water flow through the drinking tube of the M-40 protective mask since the canteen body can be squeezed.

3. Canteen Covers

The canteen adopted by the Infantry Equipment board required a separate cover. The new cover, designated as Cover, Canteen, Dismounted, M-1910, (mounted troops continued to use the earlier pattern canteen), was made of olive drab canvas reinforced around the exterior edges with olive drab cloth binding tape. Inside, the cover was lined with a gray felt material for insulation. There were two flaps at the top that left an opening for the canteen spout. A number of fasteners were examined during the equipment trials; however a stud fastener with a top that looked like a bronze general service button was selected for production. On the back of the cover there was a pattern 1910 double belt hook was held in place by a piece of webbing that was folded over and stitched. The M-1910 canteen cover, with only minor modifications, would continue in use into the 1960s



The M-1910 dismounted canteen cover (above left) is the pattern adopted for production. The illustrations on the right show the stud fasteners (top) and the 1910 pattern double belt kook (below). Note also the seam is in the back.

During World War I, some slight modifications were made to the canteen cover, the color changed slightly to a more drab appearance and, perhaps most notable the eagle snap fasteners were changed to lift-the-dot fasteners. In addition, a mounted version of the cover was

introduced with a russet leather strap secured by loops on the side and bottom of the cover that attached to the saddle by a spring clip at the top.





Above (left), is the dismounted canteen cover pattern of 1917 with the lift-the-dot fasteners, and (right), the mounted canteen cover pattern of 1917 with leather attachment strap



The M-1941 mounted canteen cover

In 1941 the mounted canteen cover was changed. On the rear of the cover there was a long web loop tab with a pattern 1910 double belt hook at the top. The tab was reinforced by a vertical web strap stitched at the top and bottom.

The double belt hooks could be used to attach the cover directly to the cartridge or pistol belt, or it could be attached to a web strap fitted with a spring clip that in turn attached to the saddle.



The M-1941 extender strap for the mounted canteen cover

Beginning in 1942, a change to specifications authorized dismounted canteen covers to be produced with side seams rather than a single seam in the back. In April 1944, the color of all Army web equipment was changed to olive drab shade 7.



A comparison of two pattern 1942 dismounted canteen covers showing the change in color that occurred in April 1944

In 1956, substantial changes were made to the canteen cover and the name was changed to Cover, Water, Canteen, M-1956. The changes included the replacing of the lift-the-dot fastener with a snap fastener with a plain black top. The method of attaching the cover to the equipment belt was also changed. A horizontal web strap was stitched to the rear of the cover in a manner that left a loop near each end. Inserted into each loop was the black metal sliding belt clip that was used on all of the 1956 web equipment.



The front and rear view of the M-1956 water canteen cover showing the snap fasteners on the flaps and the belt slides on the rear



The M-1967 water canteen cover

During the Vietnam War a new canteen cover was introduced as part of the M-1967 Modernized Load Carrying Equipment (MLCE). The M-1967 MLCE was not designed to replace the canvas and cotton duck M-1956 Load Carrying Equipment, but was designed for use in tropical environments.

The water canteen cover was fabricated of nylon cloth and webbing with an acrylic pile liner material inside. The two-flap closure was secured by means of metal snap fasteners. A small pocket was added on the front of the cover for carrying water purification tablets. The flap of this pocket was secured by means of hook and pile fastener tape (Velcro). The cover attaches to the individual equipment belt by means of two keepers with interlocking slides in the same manner as the earlier cover.

The two quart canteen introduced in 1966 came with an olive green nylon cover equipped on the back with two black metal 1956 type belt slides. The cover did not have a shoulder strap or means of attaching a shoulder strap which meant that it took up too much space and awkward to carry.

The two quart collapsible canteen that became standard in October 1968 was issued with an olive green nylon cover with a black high impact black plastic closure as used on the front of the M-1967 ammunition pouch. The opening for the canteen spout was in the corner and the inside was lined with green synthetic pile insulation. There were two belt slides attached to the back and there was a D-ring near the top on each side for an adjustable nylon shoulder sling.

At the time of the Persian Gulf War (1990-1991) tan nylon covers were issued to troops serving in the Middle East. A MOLLE version of the cover in Universal pattern camouflage was introduced in 2005.



Cover for the 2 quart collapsible canteen introduced in 1966



Above is the two quart canteen cover as originally issued beginning in 1969 (left); the cover as issued during the Persian Gulf War showing the shoulder sling attached (center); and the MOLLE pattern in universal camouflage (right)

The All-Purpose Lightweight Individual Carrying Equipment (ALICE) was introduced in 1974 to replace the M-1956 equipment and the M-1967 equipment. The 1967 water canteen cover is redesigned slightly and the five rows of vertical stitching in front is replaced with two rows of horizontal stitching that go around the center of the cover. The cover is redesignated as LC-1. In 1975 the LC-1 designation is changed to LC-2 due to some additional minor design changes



Water canteen cover LC-1





Detail of the belt clips LC-1 (top), LC-2 (bottom



Water canteen cover LC-2

The Modular Lightweight Load Carrying Equipment (MOLLE) system was introduced in 1997 to replace ALICE, but fielding was very slow. Beginning in 2002 U.S. troops serving in Afghanistan used MOLLE and by the mid-2003 issue was being extended to troops serving in Iraq. The system is modular, with many components, including a new pattern cover for the canteen.

The cover is made of nylon and originally came in either woodland pattern or three color desert pattern camouflage. A nylon web strap with a black plastic clip in front secures the canteen in the cover. There are two small pouches, one on each side, with flaps secured by hook and loop fastener. The 1956 belt slides on the back have been replaced with a polyethylene reinforced web strap with the push-the-dot fastener that mates with the Pouch Attachment Ladder System (PALS). The newest version of the cover is more like a general purpose pouch, with elastic drawstrings and an enclosed top to secure the contents.



MOLLE canteen covers or pouches in woodland pattern camouflage circa 2001(left), and in universal pattern camouflage circa 2007 (right)

4. Cups

Prior to 1874, soldier's cups came in a variety of shapes and sizes, although generally they were made of tinned iron with a single looped handle over the back seam.



Pictured above are two Civil War cups. The one on the left is identified to a member of the 61st New York Volunteer Infantry; the one on the right is identified to a member of the 10th Massachusetts Volunteer Infantry.

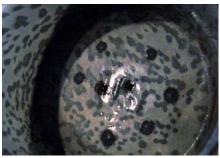
The Infantry Equipment Board of 1874 recommended that the tinned iron cup be furnished by the Ordnance Department and issued the same as other ordnance-stores. The cup was made of tinned iron with a rolled edge and a handle with rolled edges riveted over the back seam. The distinctive feature of the cup over earlier patterns is the U.S. embossed on the top of the handle. This cup would continue in use until the beginning of World War I.



Two views of the M-1874 cup, the one on the left showing the U.S. marking on the handle

In the early part of the 20th century, during the process of reviewing the equipment for use with the new M-1903 rifle. The Army experimented with a number of different patterns and material for cups. In 1903 granite ware enameling, popular with civilian kitchen items, was examined and found to be poisonous with acidic foods. In 1908 a shallow aluminum cup with insulation between the handle and the body of the cup was field tested. The new cup had promise but was overcome by events when the Equipment Board of 1909 went in a completely new direction.





An experimental granite ware cup tested in 1903 and found to be poisonous when used with acidic foods. Note the US marking on the bottom of the cup (right)



The aluminum cup with insulated handle field tested in 1908.

The Equipment Board of 1909 recommended a canteen, cup and cover combination in which the cup fit over the bottom of the canteen and both were fitted into a canteen cover. The cup was made of aluminum with a rolled edge on top and a folding handle on one side held in place by four rivets. The cup was designated as the M-1910 and the original cups were manufactured by The Aluminum Goods Manufacturing Company (A.G.M. Co.) in 1909 and 1910 and subsequently, from 1911 to 1917, by Rock Island Arsenal. All of these cups are unmarked.



Pictured above is an M-1910 unmarked A.G.M. Co. canteen cup as first manufactured for issue

During Word War I, the Quartermaster Corps assumed responsibility for individual equipment including canteen cups. These cups were manufactured under contract using the specifications developed in 1910. In 1918 the Quartermaster Corps contracted for cups to be manufactured by: The Aluminum Company of America (ACA); Aluminum Goods Manufacturing Co. (AGM Co); Buckeye Aluminum Co. (BA Co.); The J. W. Brown Manufacturing Co. (T.J.W.B.M.CO.); Landers, Frary & Clark (L F & C). The letters U.S., the name or symbol of the company and the year of manufacture are stamped either on the bottom of the cup or on the top of the handle.



Example of a World War I contract M-1910 canteen cup

Beginnings in 1942 canteen cups were manufactured of alternate materials to substitute for aluminum. Porcelain plated cups were made in limited quantities in 1942 only. Corrosive resistant steel canteens were made from 1942 to 1945. In late 1942 aluminum was released by the War Production Board, and production of aluminum M-1910 canteen cups was resumed.



A pattern 1942 canteen cup made of corrosive resistant steel. The distinctive feature of this cup is the flat folded upper edge

Some of the known manufactures of canteen cups during World War II include: Aluminum Goods Manufacturing Co. (AGM Co); Buckeye Aluminum Co. (BA Co.); Fletcher Enameling Co. (F.E. Co.); Landers, Frary & Clark (L F & C).; REP Co.; Republic Stamping and Enameling Co. (R.S.E. Co.); Southeastern Metals Co. (S.M.Co.); United States Steel Corp. (U.S.S. Corp.); Vollrath; and Vogt. Following World War II aluminum and corrosive resistant steel canteens continued in use.

In 1974 the canteen cup was redesigned as part of the LC-1 equipment. The cup was produced in stainless steel with a flat upper edge similar to the corrosive resistant steel cup of 1942. However, instead of a single folding handle, the cup had two steel wire handles that open out for use, and fold flat against the side of the cup when placed in the canteen cover. This cup remained in use into the 21st century.



The LC-1 canteen cup

5. Trenchers, Plates and Meat Cans

In the 18th century and early 19th centuries, it was common for soldiers to provide himself with a trencher for his food. The trencher was a flat wooden plate, usually square, that was easy to obtain and durable in the field. The English term "trencher" meant "a wooden board or platter on which food is served," and dates from around the year 1300. It comes from the Anglo-French word "trenchour" which, in turn, is from the Norman French "trencheor" meaning literally "a cutting place" (*Online Etymology Dictionary*). Breakfast Call is known as *Peas on a Trencher*.





Illustrated above is a wooden trencher approximately eight inches square, and an English pewter plate dating from 1752.

Prior to 1874, soldier's field mess plates came in a variety of shapes and sizes. The use of the English term "plate" meaning "a shallow dish for food," dates from around the year 1450, and is from the Latin word "plata," meaning a "flat piece of metal." In the 18th century pewter plates were sometimes used, but the metal proved to be too soft to hold up well under field conditions. Tinned iron plates were favored and generally, by the 1830's, were used exclusively by soldiers in the field.



A tinned iron plate used by a member of the 10^{th} Massachusetts Volunteer Infantry during the Civil War

In 1872 a board of officers recommended to adoption of a "meat can" for both infantry and cavalry as part of the 1872 brace system.

The term "can," comes from the Old English "canne," meaning "a cup or container," which comes from the Saxon (Germanic) word "kanna," borrowed from the Late Latin word "canna" meaning "a container or vessel" (Online Etymology Dictionary).



The 1872 meat can

The 1872 meat can was not a field mess item, but was intended to hold the uncooked meat ration to prevent the grease from getting into the material of the haversack, and everything else contained therein. The can was made of heavy tinned iron, 6.5 inches long by 5.18 inches tall, by 1.12 inches wide, with a handle on one end, and a friction lid on top with a collapsible bail handle. The side of the box was embossed with a US in an oval.

In 1874, the Infantry Equipment Board recognized for the first time the need to issue field mess equipment to the soldier and recommended a "meat-can and plate combined." The report was approved and forwarded to the Chief of Ordnance on January 4, 1875. *Ordnance Memoranda No. 19, Infantry Equipment* describes the meat can as "two oval dishes made of block-tin, one deeper than the other, which fit together, forming a meat-ration can... to the deeper dish is attached a light iron handle which folds over and holds the two together." The meat can was 8 inches long, 6.5 inches wide and 1.5 inches deep when closed. The first pattern can had a slot in the handle, which made the handle prone to bending. By 1879 a second pattern meat can with a solid handle was in production.



Above is the 1874 meat can (type 1) with slotted handle, and to the right is the 1874 meat can (type 2) with solid handle in the open position



The third and most numerous of the 1874 meat cans went into production in the early 1880s and is identified by the pull-ring on the plate being mounted in an offset position. This pattern was used during the Spanish-American War and into the 20th century. After 1910, it became a secondary standard item but was still in use into World War I.





The 1874 meat can (type 3) used by a member of the 1st Rhode Island Infantry, United States Volunteers during the Spanish-American War. The picture to the right shows the U.S. and Rock Island Arsenal markings on the handle.



Substitute standard meat can used during the Spanish-American War

During the Spanish-American War the Ordnance Department purchased substitute standard items for issue. One such item was a round version of the meat can (in at least two slight variations). Two batteries of the 3rd U.S. Artillery at the Presidio of San Francisco preparing for service in the Philippines received round meat cans. These items were also used in recruit mess halls at the beginning of World War I.

The 1909 Infantry Equipment Board recommended a new meat can that became standard in 1910. The 1910 meat can was similar previous model but larger, 8.25 inches long by 6.75 inches wide by approximately 1.5 inches deep, and it was made of aluminum. Like its predecessor the cover, which doubled as a plate, fit into the top of the frying pan and was held in place by a folding galvanized iron handle.

Early in 1918 the American Expeditionary Force (A.E.F.) reported that the 1910 pattern top plate was too shallow and recommended a deeper configuration. A new meat can with a lid one-half inch deeper, and an appropriately corresponding folding handle quickly went into production as the Model 1918.





The M-1910 meat can (above left) and the M-1918 meat can with deeper top (above right)

Prior to 1918 the M-1910 meat can was manufactured exclusively by Rock Island Arsenal. Known manufacturers for the M-1910 and M-1918 meat cans during World War I include: Aluminum Company of America (ACA); Landers, Frary & Clark (L. F. & C.); The J. W. Brown Manufacturing Co. (T.J.W.B.M. Co.); Wheeling Stamping Co.; Edmund & Jones Co.; and Rock Island Arsenal (R.I.A.).



M-1910 meat can handle marked U.S. / L.F. & C. / 1918

In 1932 the Quartermaster Department changed the specification for the meat pan. The new pan was deeper and had a segmented lid. However, because of the numbers of World War I meat cans on hand, general production did not begin until the start of World War II.

Beginnings in 1942 meat cans were manufactured of alternate materials to include tin, zinc-coated steel, and corrosive resistant steel as a substitute for aluminum. Some early production items have cast handles similar to that found on earlier meat cans, but most had a slightly curved handle with a round hole at the upper end. In late 1942 aluminum was released by the War Production Board, and production of aluminum meat cans was begun.





Above is a Can, Meat, Corrosive Resistant Steel dated 1942 (left), and a Can, Meat, Aluminum dated 1944 (right)

Some of the known manufactures of meat cans during World War II include: Aluminum Goods Manufacturing Co. (AGM Co); Buckeye Aluminum Co. (BA Co.); Eastern Aluminum Co. (E.A. Co.); Knapp Monarch Co.; Southeastern Metals Co. (S.M.Co.); and Vollrath.



Meat can markings: U.S. / ARCO, 1942 (left) and U.S. / M.A. Co. / 1944 (right)

Following World War II the term meat can was changed to meat pan. Both aluminum and corrosive resistant steel meat pans continue in use into the 1970s. Meat Pans in stainless steel were produced during the Vietnam War and continued to be issued, although virtually unused, until the end of the 20th century.



A Vietnam Era meat pan in stainless steel, marked on the handle, as seen on the right: U.S. / S/L MFG. 1965 / DSA-4-055006-TR530

6. Utensils

Prior to 1874, procurement of eating utensils (knife, fork, and spoon) was up to the individual soldier. On some occasions, such items were, purchased and distributed by a benevolent commander, purchased by company funds, or in the case of a volunteer regiment, contributed by a "friends" organization at home. Such cases were, however, the exception rather than the norm.



Seen above are two sets of utensils used during the Civil War, the set on the left was used by a member of the 10th Massachusetts Volunteer Infantry, and the set on the right by a member of the 21st Maine Volunteer Infantry.



A Union Knife Company combination folding knife, fork and spoon, shown open on the left and combined on the right. A compact and practical item this was one of the more popular items purchased by soldiers. The knife blade is marked: Union / Knife Co. / Naugatuck, and the base of the fork is marked: Army (Knife) / Union.

In 1874, the Infantry Equipment Board recognized for the first time the need to issue field mess equipment to the soldier and recommended the knife, fork, and spoon manufactured by Lamson, Goodenew & Co. of New York. The report was approved and forwarded to the Chief of Ordnance on January 4, 1875. These items are illustrated in *Ordnance Memoranda No. 19*, *Infantry Equipment*, published in June 1875.



The fork was iron cast in one piece and the tines ground to shape. It was marked "U.S." or occasionally "U.S.A." on the underside between the tines and the handle.



Knives were made of cast iron in one piece with the blades polished and sharpened. The letters U.S. were marked on the blade.



Spoons: were stamped tin plated steel and were generally marked U.S. on the top of the handle, occasionally the mark was set horizontally.

Utensils were manufactured or contracted for by Watervliet Arsenal from 1875 to 1890 and by Rock Island Arsenal from 1875 to 1902. Other known contractors include: Steward & Montgomery; Hibbard, Spencer & Bartlett; Manhattan Supply Company; Meriden Cutlery Company; J. W. Stewart Co.; and Lamson, Goodenew & Company

National Guard units of the various states were, for the most part, not issued field mess equipment during peace time. At summer camps meals were prepared in mess halls or catered so field mess owned by the states were kept in storage or in many case never acquired at all. During the mobilization of 1898 for the War with Spain the Quartermaster Corps purchased non standard utensils in order to provide for the Volunteer force. The items purchased were generally as close as possible to the Army pattern by were not marked U.S.



Spanish-American war contingency utensils

From 1902 to 1910 Rock Island Arsenal became the exclusive manufacturer of utensils for the US Army. The forks and knives were stamped steel with tin plating. The knife was stamped formed, tempered, and plated, and then an aluminum handle was cast on the tang.



1902 utensils – The knife is marked R.I.A. U.S. 1907

Spoons and forks were marked on the back of the handle with R.I.A. over the year of production. These marking were often very faint and are difficult to see. Knives were marked on the side of the handle. With the passage of the Dick Act in 1904, federal and state items were no longer differentiated by their markings.

Based on the recommendations of the Infantry Equipment Board of 1909, M-1910 utensils were similar in appearance to those of 1902. The fork and the spoon were stamped-formed form "corossionless metal" consisting of an alloy of brass and nickel. The blade of the M-1910 knife was shortened, but made in the same manner as previously. Rock Island Arsenal was still the exclusive manufacturer of these items. Production for the M-1910 utensils began in 1911. The new utensils continued to be marked in the same location as the previous items.



M-1910 utensils – The knife is marked R.I.A. U.S. 1911. The markings below the U.S. on the fork and spoon is "G I," stamped on by a National Guard unit to indicate that they were federal and not state issue items.

During World War I contracts were let with commercial manufacturers to make the M-1910 pattern utensils. The fork and spoon were stamped steel with tin platting. The knife was made in the same manner as at the arsenal with a cast aluminum handle.



M-1910 utensils made during World War I

Known contractors for M-1910 forks include: R. Wallace & Co. (1917 and 1918); Wallace Brothers Company (WB/W 1917 and 1918); William B. Durgin Company (WBD 1918); Charles Parker Company (C.P.C. 1918); and Rock Island Arsenal (R.I.A.).

Known contractors for M-1910 spoons include: R. Wallace & Co.; National Enameling Company (NEC 1917-1918); William B. Durgin Company (WBD 1918); Charles Parker Company (C.P.C. 1918); Wallace Brothers Company (WB/W 1917 and 1918); and Rock Island Arsenal (R.I.A.).

Known contractors for M-1910 knives include: American Cutlery Company (AC 1917 and 1918); Hinkley Manufacturing Company (H.M.1918); International Silver Company (1918); Landers, Frary & Clark Company (L.F. & C. 1917 and 1918); and Rock Island Arsenal (R.I.A.).

Based upon wartime lessons learned, the Army adopted a new pattern of utensil in 1926, but because of the large quantities of older patterns on hand production did not begin until 1941. The new utensils were to have openings made in the handles so that the items could be slid onto the handle of the meat can for cleaning. They continued the requirement for corossionless materials to be used and the knife to be manufactured in the same manner as the previously.

Specification USA 28-15, dated March 23, 1934 required that M-1910 utensils be modified to conform to the new pattern but evidence indicates that only a very few were ever modified, so the M-1910 utensils remained in service into World War II.

By the beginning of World War II responsibility for the design and contracting of field mess equipment was Jeffersonville Quartermaster Depot. Specification JQD-2 dated September 3,

1941 changed the material of the fork and spoon to tin plated steel and required that the knife handle be made of resin plastic. However, only one company, Landers, Frary & Clark Company was successful in producing the knife with the resin handle, so the Quartermaster Department authorized the pattern 1934 knife to be produced as a substitute standard.



Pictured above is the pattern 1934 knife with an aluminum handle (top), and the pattern 1941 knife with black resin handle (bottom)

The known contractor for the Knife, M-1926 with resin handle: Landers, Frary & Clark Company (L. F. & C. 1941). Known contractors for the substitute standard Knife, M-1926 (pattern 1934): Landers, Frary, & Company (L. F. & C. 1941); Burns (1943); Goodall Company (1943); I. P. Hyde (1943); International Silver Company (IS 1942); Also Diamond (Australia) (Diamond logo and undated); and Gregsteel (Australia)

Known contractors for the fork and spoon M-1926: Diamond Silverware Company (Diamond logo 1942) International Silver Company (IS 1942) Silco USA Division of International Silver Company (SILCO); National Silver Company (1942); Onida Ltd. (Onida 1942); and R. Wallace & Sons Company (W 1941, 1942)

On May 2, 1943, Specification JQD 349 for Fork, M-1926; and Specification JQD 350 for Spoon, M-1926, changed the material from tin to silver plate.



The M-1926 spoon and fork in silver plate as specified in 1943

Specification JQD 349A for Fork, M-1926; Specification 350A for Spoon, M-1926; and Specification JQD 2B for Knife, M-1926, all dated 2 August 1944, changed the component of the utensils to corrosion resistant steel, except for the handle of the knife.



The M-1926 spoon and fork in corrosive resistant steel

Known contractors for the fork and spoon M-1926, Corrosive resistant steel are: Diamond Silverware Company (<DS>1944-1945); International Silverware Company (1944-1945); Silco USA Division of International Silver Company (SILCO) (1945); National Silver Company (1945); Onieda Ltd (1945); and R. Wallace & Sons Company (Wallco 1945).

Specification MIL-F-284A (1950), changed the nomenclature of the M-1926 corrosive resistant steel utensils to: Fork, Field Mess; Spoon, Field Mess, and Knife, Field Mess. Specification MIL-F-284C, dated 1962, changed the knife to a one-piece stamping, and shortened the tines of the fork by .6 of an inch. This proved to be the last pattern of Army utensils to be issued.



The Spoon, Field Mess; Knife, Field Mess; and Fork, Field Mess pattern of 1962

Known contractors for the knife, fork and spoon M-1926, corrosive resistant steel (post 1950): SKOCO; United Cutlery (U.C.); and Silco USA Division of International Silver Company (SILCO).

Specification MIL-F-284E Notice 2, dated February 2002, cancelled the specification and ended field mess utensils in the US military. Plastic utensils are now provided with each meal.

7. Miscellaneous Items

Michigan National Guard Cup

Prior to the passage of the Dick Act in 1904, very few of the various states issued field mess equipment to their National Guard units. Those that did either purchased issue items from the Army or obtained unmarked items from commercial manufacturers. One very distinctive item is the Michigan National Guard cup.

The cup is very large and is made of tinned iron. It has a rounded bottom and a handle on one side, and at first glance may appear to be some type of kitchen measuring device. The handle is marked M.N.G. as seen below. A large number of these cups were brought into federal service with the various Michigan regiments during the Spanish-American War.





Two views of the Michigan National Guard cup showing its distinctive shape and the markings on the handle. This particular cup was used by a member of Company A, 31st Michigan Infantry, US Volunteers during the Spanish-American War

The M-1910 condiment can

The condiment can was introduced by the Equipment board of 1909. Its purpose was to hold coffee, and sugar, and salt. The body of the can was 5 inches long and 2.5 inches on each side. It was constructed of tinned iron, with the main body separated into two compartments by a divider in the middle. Each compartment had a screw-on cap, one at each end of the can. One of the caps has a compartment inside that is about.5 inched deep, with a tightly fitted pry-off lid. Most condiment cans are not marked, however, at least one very early can, possibly from the field trials of 1910, has been observed marked by the American Can Company.



The M-1910 condiment can

The M-1910 and M-1916 bacon can

The M-1910 bacon can was a tinned iron box 7 inches long by 2.5 inches wide by 3 inches tall with a hinged lid on top. The purpose of the can was to augment the meat can in holding uncooked or grease rations in the field, allowing the meat can to be freed-up for cooking and eating.



Bacon can Model of 1910



Bacon can Model of 1916

An improved version of the bacon can was introduced in 1916 and is marked on the lid "Model of 1916." The can was made of stamped tinned iron with rounded corners and no seams. The top lid was held in place by friction and did not have a hinge. Each corner of the 1910 bacon can had a seam that was soldered shut; however, rough usage in the field could cause the seams to split causing leakage. The 1916 bacon can, made without seams resolved this issue.

The M-1916 bacon can had the same dimensions as the M-1910 in both cases the condiment can could be stored inside the bacon can when both were not being used. With the change in field rations during World War I, the use of the bacon can was discontinued.

Canteen cup stove

The Stand, Heating, Cup, Canteen, also known as the "canteen cup stove," and much later (during the 1980s), as the "Natick stove," was introduced during World War II, (Pearson U.S. Pat. No. 2386501, 1941). This simple device was made of aluminum, tapered and shaped similar to the canteen cup. The top (narrow end) and bottom were open and there was a square opening on one side at the wider end, and several round vent holes in the side. (There were minor variations in production over the years). It was originally designed for use with wood alcohol heating tablets, but was later used with Hexamine and Trioxane tablets. When in use, the canteen cup would sit securely on the top (narrow end) of the stove. When not, the canteen cup would nest into the wider end of the stove and the two would fit easily into the canteen cover.



The Stand, Heating, Cup, Canteen also known as the canteen cup stove (above left), and the method of use (above right).