

GERMAN ARMY UNIFORMS

HEER • 1933-1945



GERMAN ARMY UNIFORMS

HEER • 1933 - 1945



Ricardo Recio Cardona
Antonio González Sánchez

First edition: 2002
©Acción Press S.A.
www.euromodelismo.com

Editor: Rodrigo Hernández Cabos
Coordinator: Ricardo Recio Cardona
Texts: Ricardo Recio Cardona and
Antonio González Sánchez
Translation: María Jiménez Barrios
Design and layout:
Kommad Publicidad S.L.

Photography:
Carlos Salvador Gómez,
Rodrigo Hernández Cabos,
Rodrigo Hernández Chacón and
Antonio González Sánchez

Photography credits: Archivo General de la
Administración (A.G.A.). Ministerio de
Educación, Cultura y Deporte.

Scanning: José Ignacio Pérez Lozano and
J. David Hernández Chacón

Pre-press production: Acción Press S.A.
Filming: Acción Press S.A.

Videlec S.L., Versal AG S.L.

Printed by: IBERGRAPHI 2002

Published by: Acción Press S.A.
C/Ezequiel Solana 16, bajo
28017 Madrid - España

The authors would like to thank the following people and institutions for their help: Archivo General de la Administración, Fundación Don Rodrigo, Militar Arganzuela, Intaria, Panzer Fusilier Regiment GD, José Ignacio Pérez, Joaquín González, Juan Rey, Gonzalo López, Javier Oscar Rodríguez, Jordi Escarré, Francisco Cerón, Ángel Larios, Carlos de la Plaza, Ángel Pinilla, Eduardo Delgado, Gustavo Cano, Luis Miguel Sánchez, Augusto Ferrer-Dalmau, Julio León, Santiago Guillén, Carlos Fernández and Manuel Alvaro.

All rights reserved. No part of this publication may be reproduced, in any form or by any means, without the publisher's prior consent.

Legal Deposit: M - 32103 - 2002
ISBN: 84-95464-21-7

Distributed by: Acción Press S.A.

• C O N T E N T S •

CHAPTER I: EMBLEMS, INSIGNIA AND BADGES

I. THE GERMAN NATIONAL EMBLEM	6
II. THE RANKS	10
III. COLLAR PATCHES	16
IV. OTHER INSIGNIA	20
V. AIGUILLETES	24
VI. SLIDES	25

CHAPTER II: CLOTHING

I. ISSUE CLOTHING	44
II. TAILOR-MADE GARMENTS	48
III. REQUISITIONED MATERIAL	50
IV. HEADGEAR	51
V. TUNICS	56
VI. TROUSERS	64
VII. GREATCOATS	66
VIII. FOOTWEAR	67

CHAPTER III: FIELD EQUIPMENT

I. GENERAL CONSIDERATIONS	132
II. FIELD EQUIPMENT	136

NOTES	172
--------------	-----

BIBLIOGRAPHY	174
---------------------	-----

Introduction

The interest for the German uniform of World War II has generated plenty of literature, especially in countries such as the United States, France or Great Britain, where some of the best work has been published. Amongst them it is worth mentioning the work that John R. Angolia and Adolf Schlinch dedicated to the three armies of the *Wehrmacht*¹, the book by Eric Lefèvre on the uniforms of the German Army (*Heer*)² and the two volumes that Brian L. Davis dedicated to the *Luftwaffe*³.

The first Spanish book on the subject was published by San Martín in 1977. It was a collection of drawings that José María Bueno gathered together under the title *Uniformes del III Reich*⁴. Four years later De Vecchi published the book by P. Marton and G. Vedelago *Los uniformes alemanes de la Segunda Guerra Mundial*⁵, which was the first publication in Spanish that included photographs of original pieces. It would take another fifteen


years before a new book was published, *Das Heer: Uniformes y Distintivos*⁶, a piece of work by Ricardo Recio and Antonio González which has been recently republished by Edimat.

aspects of the clothing of the foreign units of the *Wehrmacht*.

There is very little else published in Spanish, except for some articles in the magazines *Euro Uniformes*⁹, *Armas y municiones*, *Serga*, *Armas*, *Soldiers and Todo Armas*.

Thus, this work contributes to enlarge the scarce bibliography dedicated to German uniforms of World War II in Spain. In particular, the graphic part of this work surpasses in quality and variety that of many works published to date.

In the following pages there are over four hundred and fifty photographs which show most of the clothes and equipment used by the *Heer* between 1933 and 1945. As well as pictures, the reader will also find a comprehensive text which has been compiled working with bibliographic and documentary sources.

There are plans to complete this book with the publication of a second volume, where several authors will study the uniforms of the German soldiers that fought in the main battles of the second world conflict. 



Panzer Grenadier of the Grossdeutschland Division. (A.P.)

Ricardo Recio is also the author of a book about the Service Corps of the Blue Division⁷, but this work, like the one that Santiago Guillén and Carlos Caballero⁸ dedicated to the Blue Squadrons, focuses on very specific



Oberleutnant of the 276th Infantry Division. Germany, by the Rhine, in March 1945. The shoulder straps are hidden by Feldgrau woollen cloth covers. (C. Plaza)

1 Emblems, Insignia and Badges

In this chapter we will describe the most important emblems, insignia and badges used on headgear, tunics and greatcoats used by all the ranks and the troops of the German Army.

1. THE GERMAN NATIONAL EMBLEM

Once Hitler was in power and all the institutions of the State were subordinated to the National-Socialist Party, the Army introduced, by means of a decree dated 17th February 1934, the use of a new national emblem (*Hoheitsabzeichen*) for all headgear and tunics. This emblem was basically an eagle holding a swastika¹.

PEAKED CAPS

The first version of the emblem adopted for peaked caps was an eagle – with open wings and its head turned right – holding with its claws a swastika in the middle of a crown of oak leaves. This emblem was 4.9 cm long and 2.9 cm tall.

In March 1935 a new, more stylised, version, was adopted. This version, which was to become the definitive one, was 2.5 cm tall and 6.3 cm long.

The two emblems could be made of metal or they could be embroidered with silver or aluminium thread – since June 1935 – on dark *Feldgrau* "badge cloth"² (*Abzeichendrap*) – until June 1937 – or dark emerald green. The metal variant of the first version was made of an alloy of zinc, copper and nickel, whereas the metal variant of the second one could be made of

aluminium or zinc, although the use of the latter started during the war.

An order dated 16th November 1942 pointed out that since the 1st January of the following year the emblems of marshals and generals

wearing such emblems on their caps until the end of the war.

FIELD CAPS

For headgear, the emblems used were machine-woven and of the so-called *BeVo*⁴ type. The emblems of the non-commissioned officers and the privates were made with cotton thread. The emblems for officers were made of aluminium thread, although this could be substituted with hand-made embroidery using silver thread – until June 1935 – or aluminium thread.

These emblems bore the same design as the one used on peaked caps.

Marshals, generals and officers

The emblems used by these groups suffered the following variations:

- From October 1935 until June 1937: machine-woven emblem in silver aluminium thread on dark *Feldgrau* woollen cloth.
- June 1937 / June 1943: silver or golden emblem – for marshals and generals since 1st January 1943 – on dark emerald green.
- Since June 1943: silver or gilt



*Potsdam (Germany), 1935.
Soldiers pledging allegiance to
the Führer.
(A.G.A.- F1273)*

would have to be gilt, rather than silver, which would continue to be used by the remaining privates³. The same order abolished embroidered emblems, but many men carried on



Obergefreiter of the 276th Infantry Division. Germany, 1945. (A. Ferrer-Dalmau)

emblem on a triangular dark emerald green base. A cockade with the three colours of the Reich, black, white and red, was also machine woven on that same base⁵.

Non-commissioned officers and privates

In this case the evolution of the emblems was as follows:

- From October 1935 to June 1937: machine-woven white cotton thread emblem on an ash grey fabric base.
- June 1937 / February 1939: white grey emblem on a dark emerald green underlay.
- February 1939 / June 1940: blue grey emblem on an emerald green underlay.
- June 1940 / June 1943: similar to the last model for officers described, but grey on a *Feldgrau* underlay.
- June 1943 / 1945: grey emblem

on a *Feldgrau* triangular base. A cockade with the three colours of the Reich was also woven onto this base⁶.



*Schirmmütze belonging to an Infantry officer. The national emblem of the first version adopted for peaked caps is made of metal. However, the oak leaf orle - of the version introduced in 1920 - has been embroidered with silver thread. The chin strap braids are made of this same material. The band is made of dark *Feldgrau* woollen cloth. (A. González)*

TUNICS

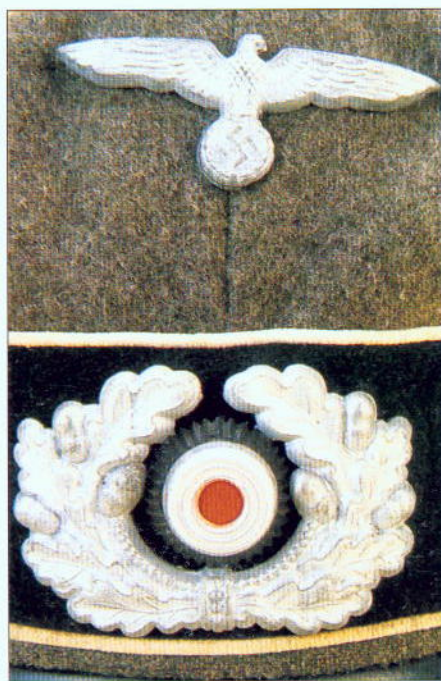
According to an order of 1934, the new national emblem was to be sewn on the top right hand pocket of all tunics. However, this decree, dated 17th February, can not have been too clear in specifying the characteristics of the emblems, as, at first there were plenty of variations. Later, the different models were accurately regulated and a clear distinction was established between the emblems for officers and the emblems for privates and NCOs.

Marshals, generals and officers

Marshals and generals wore gilt emblems, other officers wore silver emblems.

On March 22nd 1935, a hand embroidered silver thread emblem – aluminium since June – on a *Feldgrau* or emerald green base – since June 1937 – was adopted for the piped *Rock*. Later, the use of this emblem would be extended to the *Waffenrock* and the bordered *Feldbluse*.

In March 1935 it was also



The second version of the national emblem for peaked caps in its different variations: left, made of aluminium; middle, made of zinc; right, embroidered in aluminium thread. In all three cases the oak leaf orle belong to the version adopted in 1935. (C. Plaza e Intaria)

Since 1st January 1943, marshals and generals had to wear a gilt national emblem on their



headgear. Above, the metal version used on peaked caps; below, an embroidered emblem. (A. González)



established that both field and service officer tunics had to bear a machine woven aluminium thread emblem on a grey underlay – dark emerald green since June 1937 –, which had to be sewn onto a *Feldgrau* woollen cloth base. However, most officers preferred to use hand-embroidered emblems with these uniforms. This was completely irregular.

On 7th November 1935 the white *Rock* or *weisse Rock* adopted a metal emblem which could be silver or gilt, depending on whether it was for officers or marshals and generals.

On 15th July 1938 marshals and generals were authorised to use hand-embroidered emblems in all their tunics, except for the white *Rock*, with which they always had to wear metal emblems.

NCOs and privates

The emblem suffered the same evolution as in the case of field caps.

BUCKLES

The emblem on the buckles of privates and the NCOs was an eagle with closed wings looking to the left. This eagle was surrounded by two branches with oak leaves and the motto *GOTT MIT UNS* or *GOD WITH US*. In January 1936 the head of the eagle was changed to make it look right.

The national emblem was also worn on the buckle of the *Feldbinde*, a belt which was only used by officers. This belt, adopted in 1937, was always used with the Parade Uniform, and only on particular occasions with the Service and Society Uniforms. The strap was 4.5 cm wide and it was woven in aluminium thread and it

Oberfeldwebel Josef Schreiber. He is wearing the field cap (Einheitsfeldmütze) adopted in June 1943. This cap bore a machine woven national emblem on a triangular base on which a cocarde with the colours of the Reich was also woven.

(A. González)



This Infantry Gefreiter is wearing the national emblem used on field caps from October 1935 to June 1937 on his Feldmütze. It is machine-woven using white grey cotton thread on an ash grey base. The cocarde is also machine-woven on an ash grey base. (A. González)





Emblems used by officers on field caps: on the left, above, machine-woven with aluminium thread on a dark Feldgrau underlay; below, machine-woven with aluminium thread on a dark emerald green underlay; on the right, the version introduced in June 1943.
(A. González)

had two edgings in dark green. The back of the strap was made of *Feldgrau* fabric. The buckle, which was round and silver – gilt for generals –, was made of stamped metal and, as well as the national emblem, it had an oak leaf orle.

THE NATIONAL EMBLEM ON BLACK GARMENTS

In November 1934 tank crews were given a special uniform which included a black beret (*Schutzmütze*), tunic (*Feldjacke*) and trousers.

The emblems used on these garments were embroidered or woven on a black underlay of "badge cloth" or similar. The emblems for officers were embroidered or woven with aluminium thread, whereas those for NCOs and privates were machine-woven with white, later it was mouse grey, cotton thread.

II. THE RANKS

The German Army wore its rank insignias on the shoulder straps, except in the case of corporals and senior privates, whose ranks wore certain insignias on the left sleeve of tunics and greatcoats⁸.

A) Men or *Mannschaften*

Soldiers, just like military men of rank, had different names depending on their Arm or Corps – *Schütze*,

Fusilier or *Grenadier* in the Infantry, *Kanonier* in the Artillery, *Reiter* in the Cavalry, *Pionier* for Engineers, *Jäger* for Mountain Hunters, *Funker* for Signals, *Sanitätssoldat* for the Medical Corps, etc.–. Their shoulder straps were made of *Feldgrau* or dark emerald green woollen cloth and they were edged by a braid with the *Waffenfarbe* or Colour of the corresponding Arm of Service⁹ (Table I). This same shoulder strap was used by corporals, lance-corporals and senior privates. The insignia on their right sleeve showed their rank. The underlay on which this insignia was

Major of the 61st Infantry Regiment with the first version of the national emblem adopted for peaked caps. It was made of an alloy of zinc, copper and nickel.
(A. González)

worn was "badge cloth" in dark *Feldgrau* – until September 1935 –, dark emerald green – since that date – or – since 1940 – *Feldgrau*.

Since 1936, the difference between a senior private – *Oberschütze*, *Oberreiter*, *Oberkanonier*, etc – and a private was the insignia worn by the former. It was round and in the centre it had a star which was machine-embroidered in white cotton thread. Corporals used different insignia: those who had reached the rank after two years of service – *Gefreiter*, *Sanitätsgefreiter*, etc (lance-corporal) – wore, since 1936, a triangular woollen cloth base on which a V-shaped chevron was sewn¹⁰. Two years later they became corporals – *Obergefreiter*, *Sanitätsobergefrierter*, etc –. The insignia was the same as the previous one, except the chevron was double¹¹. After six years of service, the name corporal was followed by "6 or more years in service" – *Obergefreiter*, *Sanitätsobergefrierter*, etc mit 6 und mehr *Dientsjahren* –. In this



Emblems used by officers on tunics. The last two of the column on the right were also used by NCOs and privates with the Waffenrock. (A. González)



Embroidered with silver thread on dark Feldgrau woollen cloth.



Metal version used with the weisse Rock.



Embroidered with aluminium thread on dark Feldgrau woollen cloth.



Back of the metal emblem.



Embroidered with aluminium thread on dark emerald green woollen cloth.



Machine-woven with aluminium thread on a grey underlay.



For marshals and generals. Embroidered with metal thread in a gold colour.



Machine-woven with aluminium thread on a dark emerald green underlay.

case, between 1936 and 1943, the insignia was the same as that of lance-corporals, only, in the space between the arms of the V there was a star similar to the one used by senior privates. The last rank within the corporals' group was the senior staff corporal - *Stabsgefreiter* -. The insignia for this group was a star between the two arms of a V made with double chevron on a triangular woollen cloth base. This rank disappeared in 1943, but the insignia did not, as it started to be used for corporals that had been 6 or more years in service.

B) NCOs or *Unteroffiziere*

There were two groups. The first one was made up of Junior NCOs with or *Unteroffiziere ohne Portepee*; this included the ranks of lance-sergeant - *Unteroffizier*, *Sanitätsunteroffizier*, etc - and sergeant - *Unterfeldwebel*, *Unterwachtmeister*, *Sanitätsunterfeldwebel*, etc -. The other group was that of the Senior NCOs or *Unteroffiziere mit*

Obergefreiter of the 26th Infantry Regiment. In 1940 the use of signs - numbers, symbols and letters - on shoulder straps was forbidden for troops on the front line, although they could be worn at the rearward. Slides were designed to this effect. The symbols were embroidered on them and they could be removed or put back on again as desired. (Intaria)

Portepee; it included the ranks of company sergeant-major - *Feldwebel*, *Wachtmeister*, *Sanitätsfeldwebel*, etc -, battalion sergeant-major - *Oberfeldwebel*, *Oberwachtmeister*, *Sanitätsoberfeldwebel*, etc - and staff sergeant-major - *Stabsfeldwebel*,



Stabswachtmeister, *Sanitätsstabsfeldwebel*, etc -.

NCOs' shoulder straps, with Arm-of-Service colour piping, were a piece of woollen cloth on which a chevron was sewn. The combination of stars or lack of them identified the different ranks. Likewise, NCOs wore a chevron on the collar of their tunics. This chevron was the same as the one used on shoulder straps.

C) Officers or *Offiziere*

Also in this case there were two groups. The first, the Lieutenants or *Leutnante*, included the ranks of second lieutenant - *Leutnant*, *Assistenzarzt*, etc - and lieutenant - *Oberleutnant*, *Oberarzt*, etc -. and the Captains or *Hauptmann und Rittmeister*. In both cases the shoulder straps had a woollen cloth base with the corresponding *Waffenfarbe* and, on this base, two strips of double braid in a matte or shiny silver colour. Those for lieutenants also had a gilt star.



This soldier is wearing on his *Waffenrock* the machine-woven aluminium thread emblem on a grey underlay adopted in March 1935. This emblem also had to be used by officers with the *Field and Service* uniforms. (A. González)

*Evolution of the national emblem used on headgear and tunics of NCOs and privates.
(A. González and J. Escarré)*



White emblem on an ash grey underlay.



White emblem on a black underlay. Panzer troops.



White emblem on a dark emerald green underlay.



Grey emblem on a Feldgrau triangular underlay. Only for tunics.



Blue grey emblem on a dark emerald green underlay.



Grey emblem and cocarde woven on a triangular underlay. Only for field caps.



Grey emblem on a Feldgrau underlay.



Emblem and cocarde woven on a T-shaped underlay. Only Gebirgstruppe.

The second group, as is obvious by its name, was made of Captains or *Hauptleute* – *Hauptmann*, *Rittmeister*, *Stabsarzt*, etc –. Their shoulder straps were the same as the ones described above, only with two gilt stars.

D) Field Officers or *Stabsoffiziere*

There were three ranks: major – *Major*, *Oberstabsarzt*, etc –, lieutenant-colonel – *Oberstleutnant*, *Oberfeldarzt*, etc – and colonel – *Oberst*, *Oberstarzt*, etc –. The shoulder straps were the same as the ones used by Lieutenants and Captains, but the double braid was narrower and it was plaited. Shoulder straps for majors did not have any stars, those for lieutenant-colonel had one and those for colonel had two.

E) Generals or *Genërale*

There were five ranks. The lowest was that of major-general – *Generalmajor*, *Generalarzt*, *Generalveterinär* –. Next was the lieutenant-general – *Generalleutnant*, *Generalstabsarzt*, *Generalstabsveterinär* – and, next, was a rank which had different names depending on the Arm of Service: general of infantry – *General der Infanterie* –, general



Shoulder strap belonging to an Oberleutnant of the 537th Signal Battalion. It has a double braid of matte aluminium thread. (Arganzuela)



Shoulder strap belonging to a Rittmeister of the 10th Cavalry Regiment. It has a double braid of shiny aluminium thread. (J.O. Rodríguez)



Shoulder strap belonging to a Stabsfeldwebel of the 30 Pz.Abw.Abt. (Private collection)

of cavalry – *General der Kavallerie* –, general of artillery – *General der Artillerie* –, etc. The scale was completed with the ranks of colonel-general – *Generaloberst* – and general field-marshal – *Generalfeldmarschall*.

The shoulder straps for Generals were braided, like the ones for Field Officers, but with gilt and silver braid. Another difference was the fact that the stars were silver and that the woollen cloth base was always red. Field marshals had two crossed staffs of command.

RANK INSIGNIA: SHOULDER STRAPS

Although we have already touched upon certain aspects concerning shoulder straps, we will now focus on them in detail.

A) Shoulder straps for NCOs and privates

According to their shape they can be classified into two groups: pointed shoulder straps and rounded shoulder straps.

- Pointed shoulder straps: this type of shoulder strap appeared in 1933 and it was only used with the issue *Feldbluse*. Initially it was dark *Feldgrau*, a colour which was substituted in September 1935 by dark emerald green. It was removable and it had no braid with the Arm-of-service colour.

- Rounded shoulder straps: they were used with all other tunics and greatcoats and, since January 1938 they were also used with the issue

TABLE I: MAIN ARM-OF-SERVICE COLOURS (WAFFENFARBEN)

ARM-OF-SERVICE COLOUR	ARM OR SERVICE
Bright Red	Artillery ; generals and marshals
Carmine	Staff ; veterinarians
White	Infantry
Black	Engineers
Rose Pink	Armoured troops
Bourdeaux Red	Smoke troops
Light Green	Rifle battalions and mountain rifle regiments
Dark Green	Administrative officials (plus secondary colour)
Golden yellow	Cavalry
Lemon yellow	Signals
Cornflower Blue	Medical personnel
Orange	Military Police ; recruiting officers
Violet	Chaplains
Light Grey	Propaganda units ; Officers in the Reserve

Feldbluse. At first they were not removable, as one of the ends was sewn onto the shoulder of the garment. They were piped with the Arm-of-service colour and they were made out of dark *Feldgrau* – until September 1935 – or dark emerald green woollen cloth.

B) Shoulder straps for officers in command and officers

In both cases they could be fixed or removable. They consisted of two strips of silver thread – until 1935 – or aluminium thread double braid, folded and then sewn onto a base of woollen cloth with the Arm-of-service colour. The strips of braid were shiny for the *Waffenrock*, the *weisse Rock* and the piped *Rock*, whereas for other tunics the thread was matte. The braids in shoulder straps for officers in command were plaited and were narrower than the braids used for officers.

C) Shoulder straps for generals and marshals

At first, the shoulder straps for marshals were the same as those for generals: the silver and gilt braids were plaited together and mounted on a base of red woollen cloth. The only difference was that instead of having silver stars they had to crossed staffs. Initially, the staffs were a simple design, made in stamped silver and with hardly any patterns. However, on 27th September 1940,

Left, shoulder strap for an Unteroffizier of the recruitment offices of the XII Wehrkreis. The woollen cloth is dark emerald green. Right, shoulder strap for a Feldwebel of the 11th Infantry Regiment. The woollen cloth is dark Feldgrau. (J.O. Rodriguez)



Feldwebel of the 24th Pz.Abw.Abt. He is wearing the pointed shoulder straps adopted for the Feldbluse in 1933. (A. González)

the time show that marshals preferred to carry on wearing the shoulder straps with silver and gold braids used by generals.

Letters, numbers and symbols

All shoulder straps could have letters, numbers and/or symbols. These motifs – whose colour varied depending on the Arm of Service – were directly machine embroidered with cotton thread on the shoulder straps used by the men and the *Unteroffiziere ohne Portepee*. However, in the case of officers and *Unteroffiziere mit Portepee* these signs were made of metal, gilt for the former and silver for the latter.

A) Numbers

They could be Arabic or Roman numerals. The former referred to regiments or battalions and the latter referred to the Military District (*Wehrkreis*) or to the Army Corps (*Armeekorps*).



B) Letters

They were Latin or Gothic and they usually referred to non-fighting or service units. They were sometimes came together with a number.

C) Symbols

Some shoulder straps had symbols that referred to services – Health, Veterinarians, etc. – or to certain units.

III. COLLAR PATCHES

The insignia worn on the tunic collar were called *Kragenpatten* or collar patches. There were different versions: *Doppel-litzen* or double braids; *Kolbenstickerei* or double braid herringbone embroidery; *Larischstickerei* or collar patches for field marshals and generals; and *Kragenpatten für Feldjacke* or collar patches for the *Feldjacke*.

DOUBLE BRAIDS

Adopted in 1809 for King Frederick William III of Prussia's Guard Regiment, they were not used by the whole German Army until 1919.

Officers

There are the 1920 and 1927 models.

- 1920 model: the model adopted in this year was embroidered with silver thread on a base of dark *Feldgrau* "badge cloth"; in the centre of each braid there was a trimming with the Arm-of-service colour.

In September 1935 the silver thread was substituted by aluminium thread, and the base changed to dark emerald green.

A machine-woven variation was introduced during the war. It was followed by a new one in 1944 which was machine-embroidered with cotton thread.

- 1927 model: it was used with the

Society Rock, the *Waffenrock* and the piped *Feldbluse*. The design was the same as the former one but it was embroidered with shiny silver thread – aluminium since September 1935 –

on a base with the Arm-of-service colour.

NCOs and privates

Also in this case there were several models.

- 1920 model: for the *Rock* and the issue *Feldbluse*. It was machine-woven with grey cotton thread and then sewn onto a base of *Feldgrau* woollen cloth – emerald green since September 1935 –. In the centre of each braid there was a trimming with the Arm-of-service colour.

- 1927 model: it was worn with the piped *Rock*. It was machine-woven with silver thread and sewn onto a woollen cloth base with the Arm-of-service colour.

- 1935 model: adopted for the *Waffenrock*, it was also used with the piped *Rock*. The braids were machine-woven cotton thread which was then sewn onto a woollen cloth base with the Arm-of-service colour.

- 1938 model: it was used with the issue *Feldbluse*. It was the same as the 1920 model, but it was machine-woven using white cotton thread and it was not sewn onto a base, as it was applied directly onto the collar. Also, in the centre of each braid there was a dark green



The Hauptmann Zienemann, decorated with the Knight's Cross, with a NCO of his company. The latter is wearing the collar patches adopted for the Feldgrau Feldjacke in May 1940. (S. Guillén)

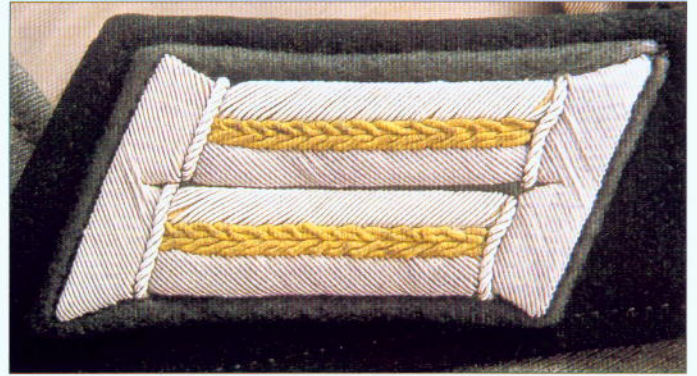


Below, collar patches for black and Feldgrau Feldjacken. (C. Plaza and F. Cerón)

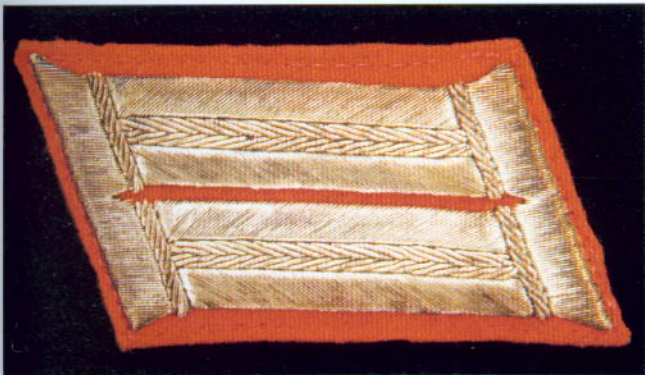
Collar patches for marshals, generals and officers. (A. González and J.O. Rodríguez)



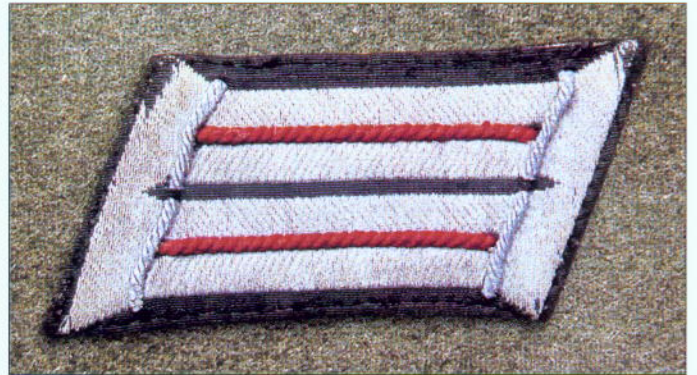
For marshals - until April 1941 - and generals, embroidered with gilt metal thread.



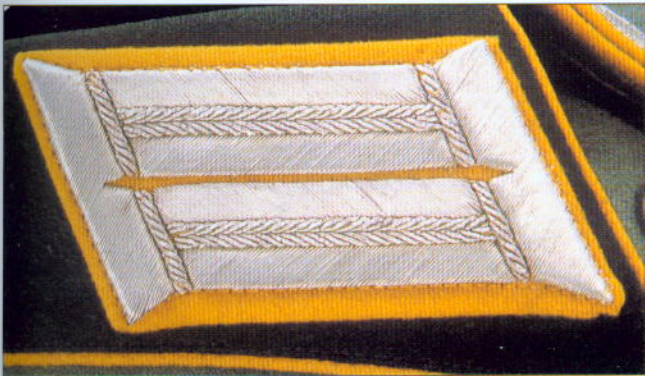
Embroidered with aluminium thread on a dark emerald green underlay.



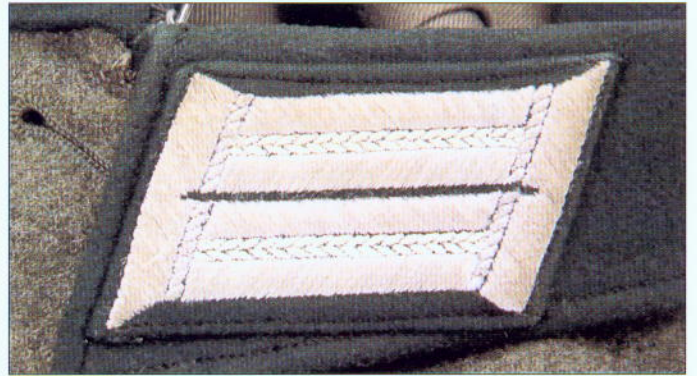
Embroidered with silver thread on a woollen cloth base with the Arm-of-service colour.



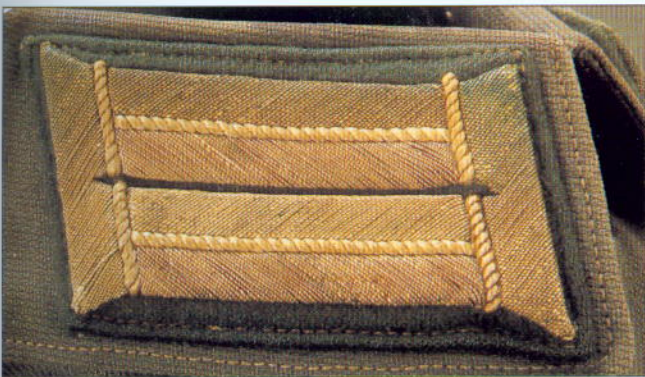
Machine woven on a dark emerald green underlay.



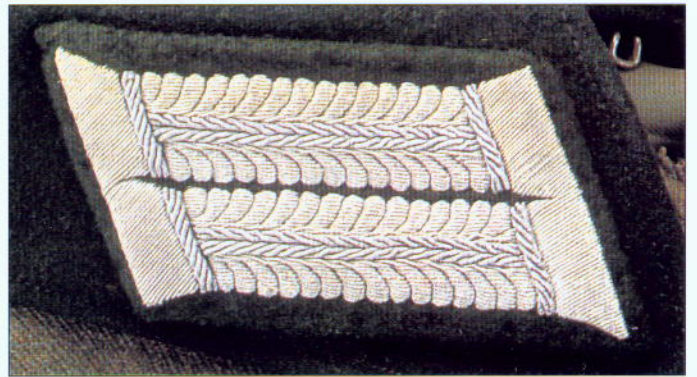
Embroidered with shiny aluminium thread on a base with the Arm-of-service colour.



Embroidered with cotton thread on a dark emerald green woollen cloth base.



Embroidered with silver thread on a dark Feldgrau underlay.



Herringbone embroidery in aluminium thread. For Staff officers.

Von Stolzmann, Oberst of the 17th Infantry Regiment. His cap bears the insignia of his unit. (A. González)



trimming, so this model could be used by all Arms.

- 1939 model: the only difference between this one and the previous one was the fact that it was machine-woven with blue grey cotton thread.

- 1940 model: it was machine woven with mouse grey cotton thread. The braid trimmings were brown-grey.

DOUBLE BRAID HERRINGBONE EMBROIDERY

Since 1919 Staff officers wore collar

patches with double braid herringbone embroidery. They could be silver or gilt, depending on the category of the military man.

At first they were embroidered with matte silver thread on a *Feldgrau* woollen cloth base – dark emerald green since 1935 – and they were used on all the tunics. Since 1927 there were two versions: the one we have just described, which was saved for the Service and *F i e l d* Uniforms, and another one embroidered with shiny silver thread on a

crimson base, and which was only worn with the *Society Rock*.

In 1935 the silver thread was substituted with aluminium thread,

and the use of the collar patches with the crimson base was extended to the *Waffenrock*.

In 1942 an order was issued by which Staff members had to use the same collar patches as other officers. However, many of them carried on using the herringbone collar patches until the end of the war.

COLLAR PATCHES FOR MARSHALS AND GENERALS

Marshals and generals had used the same collar patches since 1900. These consisted of a red woollen cloth base with braiding and two arabesques embroidered with gilt metal thread.

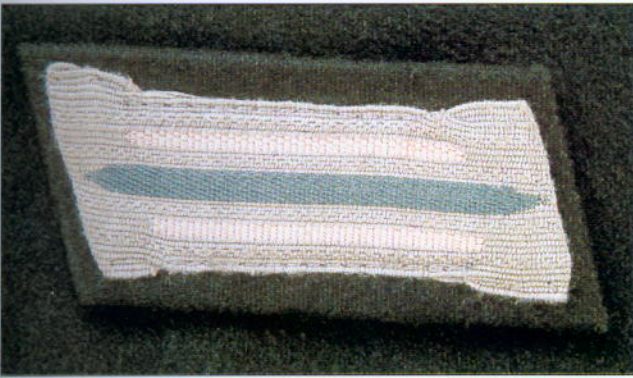
In April 1941 marshals started to wear a variation with the same design, but three arabesques instead of two. In spite of this, many marshals carried on using the initial embroidering until 1945; some of them decided to do so and others did not have time to change. Such was the case of Paulus, who surrendered the day after his promotion; and of Ferdinand Schörner, who was promoted in the last month of the war. Even though it was not allowed, some generals who did not reach the rank of marshal – such as *Generalmajor Kreipe* – wore the insignia with three arabesques on their tunic collars.

An order dated 7th June 1944 commanded that generals of the

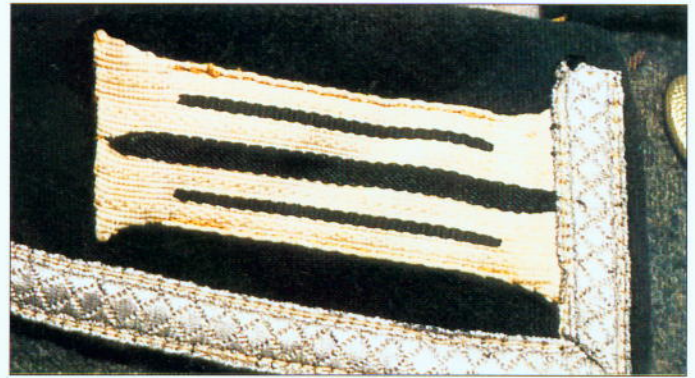
Left, the Schwedt eagle. Right, the death's head of the Prussian Leib-Husaren on the peaked cap of an Infantry officer. (A. González)



Collar patches for NCOs and privates. (A. González J.O. Rodríguez)



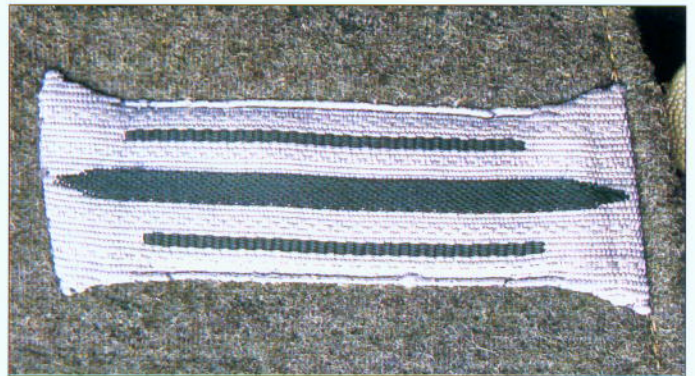
Woven with grey cotton thread and sewn onto a dark emerald green base.



Woven with white cotton thread. For all Arms.



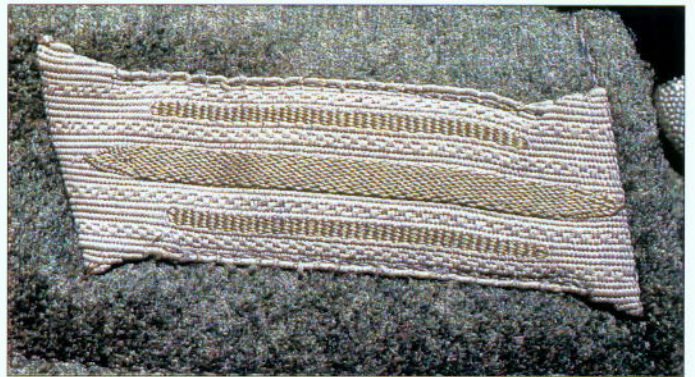
Woven with silver thread and sewn onto a base with the Arm-of-service colour.



Woven with blue grey cotton thread. For all Arms.



Woven with aluminium thread and sewn onto a base with the Arm-of-service colour.



Woven with mouse grey cotton thread. For all Arms.

Sonderlaufbahn (Services) use collar patches embroidered on a base with the Arm-of-service colour: doctors, blue; veterinarians, crimson; etc.

COLLAR PATCHES FOR THE FELDJACKE

As we mentioned above, in November 1934 the armoured units adopted a black tunic called *Feldjacke*. The collar patches worn on this tunic showed the death's head

of the Prussian *Leibhussars* on a black woollen cloth base with piping in the Arm-of-service colour:

- *Panzer* regiments: rose pink
- Reconnaissance groups: golden yellow.
- 24th *Panzer Regiment*: golden yellow since February 1942.
- Sapper companies: black until May 1940 and black and white since that date.

- Signal: lemon yellow.

In May 1940 the equipment for assault guns (*Sturmartillerie*) and for self-propelled artillery also included the *Feldjacke*, but in *Feldgrau*. At first, the collar patches used with this tunic were like the ones just described, only with the base in the same colour as the tunic. In 1943 these were substituted by the *Doppeltitzen*: in the case of NCOs and privates they were

the 1940 model and they were sewn onto a *Feldgrau* base with red piping. Officers, on the other hand, had to use double braids embroidered with aluminium thread on a dark emerald green woollen cloth base.

IV. OTHER INSIGNIA

This section will focus, amongst others, on the *Erinnerungsabzeichen*, or tradition badges.

TRADITION BADGES

These badges were the death's head of the Prussian *Leib-Husaren*, the *Brunswick* death's head and the *Schwedt* eagle. They were worn on peaked caps, below the national emblem. It is not clear whether or not they could be worn on field caps, but many photographs of the time show that this was a fairly common practice¹³.

The death's head of the Prussian Leib-Husaren

Since 1921 the 1st and 2nd squadrons of the 5th Cavalry Regiment wore this death's head on their caps, thus continuing with the

tradition of the Prussian *Leib-Husaren* regiments. These were units that disappeared as a consequence of the restructuring of the Cavalry Arm after World War I.



Peaked cap for NCOs and privates of the 17th Infantry Regiment. (A. González)

On 25th February 1938 the use of this death's head was extended to the Regiment Staff, including the music

band and the first group of the reserve squadron.

In August 1939, on the eve of World War II, the 5th Regiment was dissolved and, with it, virtually all the Cavalry divisions, as the new conception of war demanded a more motorised army. The effective forces of the Regiment were integrated into reconnaissance groups N° 12, 32 and 175. The use of the death's head was continued in these units; it was unofficial but allowed. On 3rd June 1944 the 5th Regiment reappeared, this time made up of elements coming from the Nord Cavalry Regiment, who still wore the death's head on their caps.

The Brunswick death's head

The two tibias were more spaced out and the death's head itself was narrower and longer than that of the Prussian *Leib-Husaren*. It dates from the beginning of the 19th Century, when Frederick William, duke of Brunswick adopted it as a badge for his troops.

TABLE II: SPECIALITY BADGES

SPECIALITY	SYMBOL OR LETTER
<i>Brieftaubenmeister</i> or Pigeon Master	Gothic (B)
<i>Feuerwerker</i> or Pyrotechnist	Gothic (F)
<i>Festungsbaufeldwebel</i> or Construction Specialist <i>Feldwebel</i>	Gothic (Fb)
<i>Festungspionierfeldwebel</i> or Fortification Engineer <i>Feldwebel</i>	Gothic (Fp)
<i>Funkmeister</i> or Radio Operator Master	Three crossed thunderbolts
<i>Gasschützunteroffizier</i> or <i>Unteroffizier</i> Specialised in Antigas Defence	Gothic (Gu)
<i>Gerätverwaltungsunteroffizier</i> or <i>Supplies Unteroffizier</i>	Gothic (G)
<i>Hufbeschagpersonal</i> or Blacksmith	A horseshoe
<i>Hufbeschaglehrmeister</i> or Blacksmith Instructor	A horseshoe and a star
<i>Nachrichtenmechaniker</i> or Signal Mechanic	Gothic (M) above a horizontal thunderbolt
<i>Regimentssattleruntermeister</i> or Saddler <i>Untermeister</i>	Gothic (Rs)
<i>Sanitätsunterpersonal</i> or Health Personnel	Snake with Aesculapius staff
<i>Schirmmeister</i> or Saddler Master	Gothic (S)
<i>Truppensattlermeisteranwärter</i> or Aspiring Saddler	Gothic (Ts)
<i>Unterveterinär</i> or Veterinarian Personnel	A snake
<i>Waffenunteroffizier</i> or Armourer <i>Unteroffizier</i>	Two crossed guns
<i>Wallfeldwebel</i> or Bastion <i>Feldwebel</i>	Gothic (W)
<i>Zahlmeisteranwärter</i> or Aspiring Treasurer	Gothic (Z)
<i>Zeugmeister</i> or Uniform Store NCO	Gothic (Zg)
<i>Nachrichtenpersonal</i> or Radio Operator	A thunderbolt in the Arm-of-service colour
<i>Steuermann</i> or Motorboat Pilot	A helm over an anchor

Hand embroidered sleeve badge for the Gebirgstruppe. (Private collection)



During World War II it was worn by the 92nd Infantry Regiment and the 17th Regiment of Hussars, units belonging to the X Armeekorps. Its use was discontinued at the end of the war, but it reappeared again in 1921 as the badge for the 1st and 4th companies of the 17th Infantry Regiment and of the 4th Squadron of the 13th Cavalry Regiment.

On 21st February 1938 its use was extended to the Staff and to the 1st and 2nd battalions of the 13th and 14th companies of the 17th Infantry Regiment. The use of this badge was also made compulsory for the remaining units of the 13th Cavalry Regiment, which was dissolved shortly before the beginning of World War II. Only its reserve squadron remained. Its effective forces, that carried on wearing the death's head, were integrated in the 22nd, 30th, 152nd and 158th reconnaissance groups.



NCO of the 17th Regiment of Mountain Hunters. He is wearing the badge for the Gebirgstruppe on his sleeve. It is machine-woven with cotton thread. (A. González)

In accordance with an order dated 10th February 1939 this badge was substituted by that of the Prussian *Leib-Husaren*, but his order, like others, was hardly obeyed. Thus, many members of the forces carried on using the *Brunswick* death's head.

On 26th May 1944 the 41st Cavalry Regiment was organised with elements of the *Süd* Cavalry Regiment. The whole unit used the death's head, a right which was also granted to the 4th Cavalry Brigade, except in



Hand-embroidered sleeve badge for the Jäger. (A. González)

Left, a Jäger, decorated with the Knight's Cross. He is wearing a badge which is machine-woven with cotton thread. (A. González)





A mountain hunter with the Edelweiss badge on his Schirmmütze. (A. González)

UNIT BADGES

The Mountain Hunters (*Gebirgsjäger*) and *Jäger* units wore special badges that identified them on their tunics, greatcoats and headgear.

Mountain Hunters

The badge worn by Mountain Hunters on the right sleeve of their tunics and greatcoats was an oval base of woollen cloth or another fabric on which an *Edelweiss* surrounded by a braid was either embroidered or woven.

The *Edelweiss* worn on the *Bergmütze* and the *Schirmmütze* was made of metal.

Jäger Units

The badge for members of these units was a branch of oak leaves made out of metal for the *Einheitsfeldmütze*, or embroidered or woven on an oval base of woollen cloth or another fabric and then surrounded with a braid when it was worn on the right sleeve of tunics and greatcoats.

SPECIALITY BADGES

NCOs and specialist troops were identified by means of a series of badges made out of fabric which were sewn onto the right sleeve of their tunics and greatcoats. These badges consisted of a circular or oval base of *Feldgrau* or dark emerald green

the case of the 5th Regiment, which continued using the Prussian *Leib-Husaren* badge.

The Schwedt eagle

This badge probably dates from 1689, when one of the oldest units of the German Army was created. Its garrison was located in Schwedt a. D. Oder. The reason why this badge was used through time is unknown.

In 1921 an order was issued, by which the 2nd Squadron of the 6th Cavalry Regiment had to wear a badge similar to the one worn in its day by the 1st Regiment of Dragons of Brandenburg N° 2, better known as *Schwedter-Dräger* or Dragons of *Schwedt*. Five years later, in 1926, its use was extended to the 4th Squadron.

In 1933, when Hitler ascended to power, the eagle recovered its original look, as during the Weimar Republic it had lost its crown and the

band with the motto: *Mit Gott, für König und Vaterland* or With God, for the King and the fatherland.

In February 1938, the 3rd Battalion of motorcyclist riflemen were granted the right to wear this badge on their caps.

In August 1939 the 6th Cavalry Regiment was dissolved, and its effective forces became part of the 33rd, 34th, 36th and 179th reconnaissance

groups; units that kept the eagle on their caps.

This badge was also used by the *Mitte* Cavalry Regiment, created in 1943 and which became the 3rd Cavalry Brigade the following year.



Coats of arms of each of the three series in which the grades of shooter were divided. From right to left, grades 1 to 4, 5 to 8 and 9 to 12. (A. González)

The three coats of arms used on the braids given to armoured units. From right to left, grades 1 to 4, 5 to 8 and 9 to 12. (A. González)



"badge cloth", on which the specific symbol or letter for each speciality was embroidered with yellow¹⁴ cotton thread (Table II).

Soldiers who had passed the specialist exam but had not yet been given a post as such¹⁵, wore a chevron two centimetres below the lower edge of the badge. This chevron was removed when they received a post. However, this system used to differentiate those specialists that had a post from those that did not was changed in 1939. Since that date, specialists with a post were identified by an aluminium thread trimming which was embroidered around the whole badge.

On the other hand, there was a badge which served, not only to identify the soldier's speciality, but it was also like a reward. This badge, which was worn on the left sleeve, was that of Artillery Aimer. There were two versions:



The different grades within each series were identified by means of some acorns or shells that hung from the lower end of the aiguillette. For grades 9 to 12, both acorns and shells were gilt.
(A. González)

Feldgrau circular base of woollen cloth. The second model, created on 16th December 1936, was a flaming shell surrounded by an oak leaf orle; all of it woven on a *Feldgrau* or dark emerald green oval base of woollen cloth.



The last badge in this section is that for standard bearers, which identified those NCOs that carried the flags of the regiments and battalions.

This traditional badge of the German Army disappeared after World War I and it was reintroduced on 4th August 1936. It was worn on the right sleeve of tunics. It was machine-woven with cotton and aluminium thread on a dark emerald green base. The design consisted of an eagle on a bunch of oak leaves. Behind the eagle there were two regiment flags whose background colour varied depending on the Arm of Service.



Above, aiguillette for first series first grade shooter. Below, aiguillette for second series fifth grade shooter.
(J.O. Rodríguez)

- *Nachtzeichen für Artillerie*: it was introduced on 3rd June 1936 to reward the best artillery aimers. The first model was a flaming grenade embroidered with yellow thread on a

- *Richtabzeichen für Nebeltruppen*: introduced on 17th February 1937 for the best aimers amongst rocket launchers or *Nebelwerfer*.

SWALLOW NESTS

Swallow nests or *Schwalbennester* were a decoration worn near the shoulder on tunics – never on greatcoats – and which served to identify Army musicians. They were crescent shaped and they were made up of a woollen cloth base in the Arm-of-service colour, crossed by seven vertical pieces of chevron joined together by a horizontal one. There were three types, depending on the instrument or the category of the musician:

- Drums: silver-grey chevrons.
- Trumpeters and musicians: shiny aluminium thread chevrons
- Major drum: shiny aluminium thread chevrons and a fringe of the same material.

V. AIGUILLETTES

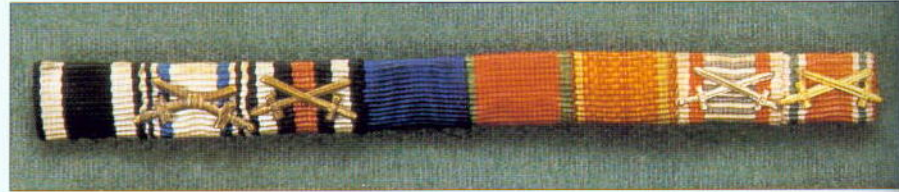
There were three types: aiguillette for officers, aiguillette or insignia for assistants and aiguillettes for shooters.

AIGUILLETTE FOR OFFICERS

This aiguillette – called *Achselband für Offiziere* – was adopted on 22nd June 1927. At first it was only used with the Society Uniform. It consisted of a piece of plaited braid of silver thread and another piece of the same material but not plaited. Marshals and generals also used it, but in their case it was made with gilt metal thread.

On 29th June 1935 a second plaited braid and two metal tags were added. Later, on 4th July 1937, its

use was extended to the Parade Uniform, although only in two cases: in parades presided over by the *Führer*, and in those organised for his anniversary. However, later, the use of this aiguillette became compulsory with this Uniform in every circumstance.



Slide for everyday use. (A. González)

AIGUILLETTE OR INSIGNIA FOR ASSISTANTS

This aiguillette – *Adjutanten Abzeichen* – distinguished functions, as it served to identify officers assisting a chief of corps or a unit commander. It was made out of silver or aluminium thread – since 1935 – and it consisted

of a piece of plaited braid, another piece of braid which was not plaited and two tags hanging from the end closest to the shoulder strap. It was worn on tunics and greatcoats with Field, Service and Presentation uniforms, but only when the officer was carrying out the functions of an assistant.

machine gun, mortar and field gun. These chevrons – which were green bands (silver since 1928) sewn horizontally onto the left sleeve of tunics – were substituted on 29th June 1936 by plaited braids similar to those used between 1894 and 1920.

Shooter aiguillettes or *Schützenabzeichen* were made of matte aluminium thread and they comprised twelve grades organised in three series of four. Each series was identified by means of a coat of arms which decorated the racket of the aiguillette. The grades in each series were identified by some acorns hanging from the lower end.

They were worn with all uniforms except the Service and the Field uniforms, and never on the greatcoat. The end closest to the racket was fastened under the right shoulder strap; the other end was hooked onto the second button of the tunic.

As was the case with other articles, these were supplied by the regional Army supplies offices, although they could also be bought from shops. In this case they had a more luxurious look, as they were usually made with shiny aluminium thread.

On 16th December 1936, the acorns were substituted with shells in aiguillettes for the Artillery.

In 1937 the use of shooter aiguillettes was extended to gunners of 37mm anti-tank guns, 20mm and 30 mm anti-aircraft guns, *Kwk 30* 20mm guns, *Nebelwerfer* guns and Infantry mortars.

On 17th October 1938 armoured units received an aiguillette that differed from the rest in that it had a coat of arms on the racket. For the first four grades this coat of arms



Since 1939 specialists with a post were identified by an aluminium thread trimming edging the speciality badge. In the photograph, on the right, a Supplies Unteroffizier with a post. (A. González)

SHOOTER AIGUILLETTES

Chevrons were used to reward and distinguish those that had obtained the best results shooting with rifle, gun, automatic rifle,

represented a crown made with a tank chain, the German national emblem and a *Pzkw.I.* tank. For grades 5 to 8 the crown was made with oak leaves. Aiguillettes for grades 9 to 12 also used this second coat of arms, only in gilt.

Until 19th December 1938, the aiguillettes used by armoured units had acorns which were identical to the general model. It was on that date that they were substituted with shells similar to the ones used with Artillery aiguillettes.

VI. SLIDES

Two types were used: the dress slide or *grosse Ordensschnalle*, and the everyday slide or *kleine Ordenschnalle*. Both were worn on the left side of the tunic, at the same height as the second button. Also, in both cases, decorations were placed in order of importance, from right to left¹⁶.

DRESS SLIDE

This slide was used to wear decorations with their ribbons. It was used with the Service Uniform in certain circumstances, with the Great Society Uniform and with the Parade Uniform.


It had a brass base about four centimetres wide where the ribbons of the decorations were arranged. Some slides were made in such a way that it allowed for the decorations to be removed leaving only the ribbons. Thus, they could also be used as everyday slides.

EVERYDAY SLIDE

This slide was used for ribbons only, and it could be used with the Field Uniform, Presentation Uniform and Walking-out Dress.

In most cases it had an aluminium, zinc or even plastic base of 12, 15 or 18 mm wide. When the number of decorations was greater than eleven two slides could be worn. In this case a leather structure about 12 mm wide was used.

Recruits of armoured regiments training with NSKK tanks. (S. Guillén)

The ribbons were worn in two ways: the usual way was to place the ribbons one after the other joining the edges together. The "Bavarian" way was to use double ribbons, twisting them slightly and making them slightly overlap each other. The choice of style depended only on the soldier's personal taste. 



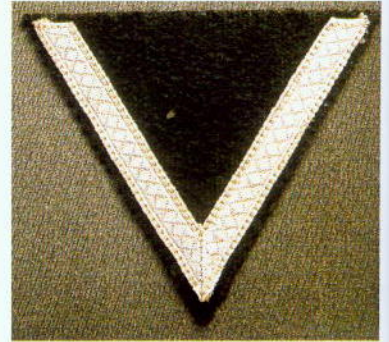
RANK INSIGNIA

The insignia in the top row were worn on the left sleeve of tunics and greatcoats.

(A. González, J.O. Rodríguez)



Oberschütze



Gefreiter



Schütze, Oberschütze,
Gefreiter, etc



Unteroffizier



Unterfeldwebel



Wachtmeister



Major



Oberstleutnant



Oberstarzt



Generalmajor



Obergefreiter



Obergefreiter mit 6 und mehr
Dienstjahren. *Between 1936 and 1943*



Stabsgefreiter until 1943 and
Obergefreiter mit 6 und mehr
Dienstjahren *since that date*



Oberfeldwebel



Stabsfeldwebel



Leutnant



Oberleutnant



Hauptmann



Generalleutnant



General der
Infanterie,
Artillerie, etc.



Generaloberst



Generalfeldmarschall



Generalfeldmarschall,
since 1943

BUCKLES

The national emblem was also worn on belt buckles.

1. Feldbinde. Gilt buckle for marshals and generals. (A. González)

2. Feldbinde. Silver buckle for officials. (A. González)

3 and 4. Officials with the Feldbinde. (A. González)

5. Steel buckle painted Feldgrau. For Field and Service uniforms. (A. Pinilla)

6 y 7. Stamped aluminium buckle. (AGA F-1272)





I



HAUPTFELDWEBEL

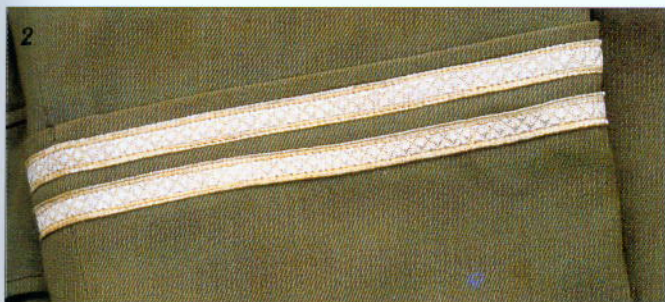
The Hauptfeldwebel or Spiess – Hauptwachtmeister in the Cavalry –, who wore chevrons on the sleeves of tunics and greatcoats, was the oldest NCO of a company. He was destined with the Staff of the company.

1. Eight button Ausgehrock belonging to a Hauptfeldwebel of the 30 Pz. Abw.Abt. (Private collection)

2. Detail of the chevrons. (Private collection)

3. In the foreground, a NCO with chevrons on the sleeves of his Feldbluse. (A. González)

4. There is a Hauptfeldwebel sitting in the front row, in the middle, on the left of the officer in charge of the company. (A. González)



SWALLOW NESTS

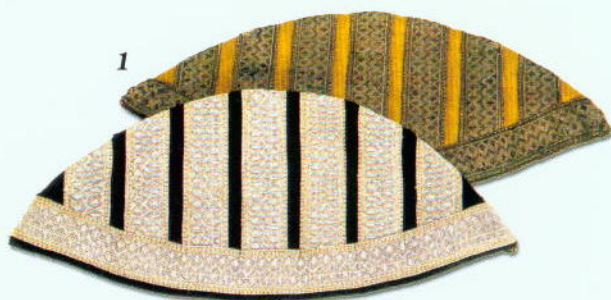
1. Swallow nests for trumpeters and musicians. The crescent that appears in the foreground has a black underlay (Engineers) and it has three aluminium thread chevrons. The other crescent has a golden yellow underlay (Cavalry) and silver thread chevrons. (A. González)

2. Major drum of the Music Band of the 42nd Infantry Regiment. (Arganzuela)

3. Swallow nest for Infantry musicians and trumpeters. (Intaria)

4. Swallow nest for Cavalry great drum with aluminium thread piping. (J.O. Rodríguez)

5. Waffenrock belonging to a major drum of a Cavalry Regiment. (J.O. Rodríguez)



5



SHOOTER AIGUILLETTES

In 1936 plaited braids that comprised twelve grades organised in three series of four were substituted with shooter chevrons.

1. Detail of the coat of arms that identified the series which comprised the first four grades. (J.O. Rodríguez)

2. NCO wearing a first series second grade shooter aiguillette. (A. González)

3 and 4. Between 1920 and 1936 chevrons were used to reward and identify the best shooters. The colour photograph shows the insignia for a fourth class elite shooter, according to the modifications introduced in 1928. (A. González)

5. Ausgehrock belonging to a Feldwebel of the 11th Infantry Regiment. The collar is dark Feldgrau. The fourth class elite shooter chevrons are worn on the left cuff. (J.O. Rodríguez)



1



2



3



4

5



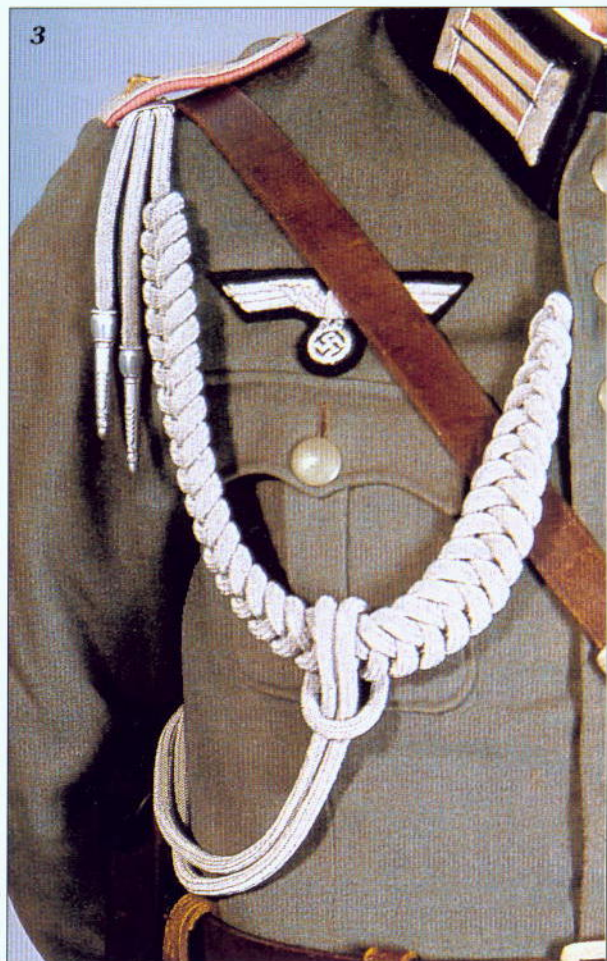
AIGUILLETES FOR OFFICERS AND ASSISTANTS

The aiguillette for officers was modified in 1935, when a second plaited braid and two metal tags were introduced. The aiguillette for assistants was made of silver or aluminium thread and it consisted of a piece of plaited braid, a second piece which was not plaited and two tags hanging from the end closest to the shoulder strap. It was worn on tunics and greatcoats with the Field, Service and Presentation uniforms, but only when the officer was carrying out duties as an assistant.

1. Administrative officer wearing the second model of aiguillette for officers. (A. González)

2. The aiguillette for officers used by marshals and generals was made of gilt metal thread. (A. González)

3 and 4. Aiguillette for assistant made with aluminium thread. (C. Plaza)



4



Hauptmann und Adjutant of a Panzer regiment. France, 1943. (C. Plaza)

1



SPECIALITY BADGES

1. Ausgehrock belonging to a standard bearer NCO of the 7th Signal Battalion. (Intaria)
2. Badge belonging to a radio operator (Nachrichtenpersonal) of an artillery unit. (A. González)
3. Badge for a standard bearer of a Panzer regiment. (A. González)

2



3



Wallfeldwebel



Gasschützunteroffizier



Feuerwerker



Richtabzeichen für Artillerie



Sanitätsunterpersonal
with a post



Sanitätsunterpersonal



Funkmeister



Richtabzeichen für Nebeltruppen

SLIDES

1. Everyday slide. (A. González)
2. Everyday slide with ribbons mounted "Bavarian style". (A. González)
3. Oberstleutnant wearing a dress slide on his Waffenrock. (A. González)
4. Generalmajor Postel. He is wearing an everyday slide mounted on a leather structure. (A. González)
5. The large number of decorations that this Generalmajor had made him use two slides. (A. González)
6. Dress slide. The tunic belonged to Generalleutnant Max Dennerleim. (A. González)



6




















































ORDER OF PREFERENCE OF ORDERS AND DECORATIONS

The list that follows shows the order of preference of the different orders and decorations, according to the 1943 Regulations, which was very similar to those published in 1935 and 1939. Its main contribution was the inclusion of six new decorations - marked on the list with numbers 2 to 6 and 38. Nevertheless, these Regulations were not always followed scrupulously, as many Army members arranged their decorations according to their tastes or preferences. (A. González)

1. **Eisernes Kreuz.**
Iron Cross.
2. **Kriegsverdienstkreuz mit und ohne Schwertern.**
Cross to the Military Merit, with or without swords.
3. **Ehrenzeichen für deutsche Volkspflege mit Schwertern.**
4. **Medaille für deutsche Volkspflege mit Schwertern.**
5. **Medaille "Winterschlacht im Osten 1941/42".**
Winter campaign medal.
6. **Kriegsverdienstmedaille.**
Medal to the Military Merit.
7. **Hausorden von Hohenzollern.**
Hohenzollern House Order.
8. **Roter Adlerorden 3. oder 4. Kl.**
Order of the Prussian Red Eagle (3rd and 4th class).
9. **Kronenorden 3. oder 4. Kl.**
Order of the Crown of Prussia (3rd and 4th class).
10. **Österreichischer Militär-Maria-Theresien-Orden.**
Military Order of Maria Theresa of Austria.
11. **Österreichischer Leopold-Orden mit der Kriegsdekoration.**
Order of Leopold of Austria with war insignia.
12. **Bayerischer Militär-Max-Joseph-Orden.**
Military Order of Maximum Joseph of Baviera.
13. **Bayerischer Militär-Sanitätsorden.**
Baviera Military Health Order.
14. **Sächsischer Militär-St. Heinrich-Orden.**
Military Order of St. Henry of Saxony.
15. **Württembergischer Militär-Verdienst-Orden.**
Wurtemberg Military Merit Order.
16. **Badischer Militärischer Carl-Friedrich-Verdienstorden.**
Military Order of Charles Frederick of Baden.
17. **Preußisches goldenes Militärverdienst-Kreuz.**
Gold cross to the Military Merit of Prussia.
18. **Preußisches Militärehrenzeichen 1. und 2. Kl.**
1st and 2nd class Military Medal of Prussia.
19. **Österreichische goldene und silberne Tapferkeits-Medaille.**
Gold medal to courage of Austria.
20. **Bayerische goldene und silberne Tapferkeits-Medaille.**
Gold and silver medal to the Military Merit of Baviera.
21. **Sächsische goldene Medaille des St. Heinrich-Ordens.**
Gold medal of the Order of St. Henry of Saxony.
22. **Württembergische goldene Militär-Verdienstmedaille.**
Gold medal to the Military Merit of Wurtemberg.
23. **Badische Militärische Carl-Friedrich-Verdienst-medaille.**
Military Medal of Charles Frederick of Baden.
24. Other German Orders and decorations to merit on the field according to the order of importance, and, amongst those of equal category, according to the date when they were awarded.
25. **Ehrenchreuz des Weltkrieges.**
World War I Cross of Honour.
26. **Österreichische Kriegserinnerungs-Medaille.**
Austrian medal in commemoration of the Great War.
27. **Kriegsdenkmünze 1864**
Medal of the 1864 Campaign.
27. **Erinnerungs-kreuz 1866**
Medal of the 1866 Campaign.
27. **Kriegsdenkmünze 1870-71**
Medal of the 1870-71 Campaign.
28. **Österreichische Kriegs-Medaille.**
War Medal of Austria.
29. **Südwestafrikadenkmünze.**
Medal of South Africa.
29. **Kolonial-denkmünze.**
Medal of the colonies.
29. **Chinadenkmünze.**
Medal of China.
30. **Schlesisches Adler.**
Silesia Eagle.
31. **Rettungsmedaille.**
Rescue Medal.
32. **Dienstauszeichnung del Wehrmacht.**
German Crosses and Medals of Service to the Army.
32. **Österreichisches Militärdienstzeichen.**
Austrian Medal of Service to the Army.
33. Other distinctions of the State and of the National Socialist Party (NSDAP) in order of degree and, amongst those of equal category, according to the order in which they were awarded.
34. **Deutsches Olympia-Ehrenzeichen.**
Cross of the Olympic Games.
35. **Medaille zur Erinnerung an den 1. Oktober 1938.**
Medal in commemoration of the annexation of Austria 13-03-38.
36. **Medaille zur Erinnerung an die Heimkehr des Memellandes.**
Medal in commemoration of the annexation of Czechoslovakia 01-08-38.
37. **Medaille zur Erinnerung and die Heimkehr des Memellandes.**
Medal in commemoration of the return to Memel 22-03-39.
38. **Deutsches Schutzwall-Ehrenzeichen.**
39. **Deutsche Olympia-Erinnerungsmedaille.**
Medal of the Olympic Games.
40. **Ehrenzeichen des Deutschen Roten Kreuzes.**
Red Cross German decoration.
41. Other political distinctions in the order they were awarded in.
42. Other authorised national service distinctions in the order they were awarded in.
43. Foreign Orders and decorations in the order they were awarded in.

ORDER OF PREFERENCE ACCORDING TO THE 1943 REGULATIONS

							
1		2		3	4	5	6
							
7	8		9		10	11	
							
12	13	14	15	16	17	18	19
							
20	21	22	23	24	25		26
							
27a	27b	27c	28	29a	29b	29c	30
							
31	32a	32b	33	34	35	36	37
							
38	39	40	41	42	43		

II Clothing

Before describing the garments that made up the uniforms, it is best to make some general comments on the subject. First of all a distinction must be made between privately tailored, issue clothing and requisitioned material.

I. ISSUE CLOTHING

This is what the Army issued to privates and NCOs. These clothes were also used by officers. The only difference was that for the former they were free whereas the latter had to pay for them.

DISTRIBUTION

During World War II the German Army was organised in two major blocks called *Ersatzheer* or Reserve Army and *Feldheer* or Field Army. The units on the first line and the rearguard of the front belonged to the latter, while the *Ersatzheer* was made up of troops destined in Germany.

The acquisition, storage and supply of issue clothing were carried out according to this division¹.

A) *Ersatzheer*

The purchase of Clothing and Equipment was carried out through the Armed Forces Office (*Wehrmachtbeschaffungsamt für Bekleidung und Ausrüstung*). However, storing and supplying the garments to the troops were responsibilities of the Army Office for Administrative Matters (*Heeresverwaltungsamt*). Both were located in Berlin, but the second one also had offices in each of the Military Districts (*Wehrkreis*) in which the German territory was

divided. In turn, each of these offices was made up of different sections, identified by letters; Section E (*Sachgebiet E*) was in charge of supervising the work of the Army

depended on the different Forces (*Armeen*)². To this effect, Divisions applied for the material they required to the Army Corps (*Armeekorps*). They then passed on the application to the Armies, whose Quartermaster generals then assigned the correct garments to each division. Having taken these garments from the aforementioned stores, the divisions kept part of their deposits and gave out the rest to the soldiers.

CLOTHING CONSERVATION

Privates and NCOs were responsible for the conservation of all the material they received, which was property of the *Reich*. The Army contributed by supplying sewing and cleaning utensils and grease for boots. Moreover, each unit had several specialists – shoemenders, tailors and harness makers – who were in charge of mending

whatever the soldiers could not repair themselves. The material which could not be repaired by these specialists was sent to "recovery workshops" in Germany. Once it was repaired it was put back into the distribution circuits so that it could reach the troops.

Officers were equally responsible for the good conservation of their material, so they also had to follow



1918 Helmet with the three-coloured emblem. (A. González)

Clothing Depots (*Heeresbekleidungsämter*), where the purchased material was stored and where all the Wehrkreis troops were equipped.

B) *Feldheer*

In this case the clothes were supplied through stores that



Second shooter of a machine gun team of the 276th Infantry Division. Germany, 1945. (J. Escarré)



Evolution of the Feldgrau shade: A. 1939/1940, B. 1940/1941, C. 1941/1944, D. 1944/1945.

the regulations about upkeep and they could use the workshops in their unit to have their clothing and equipment repaired.

FABRICS

Most issue garments were made of black or *Feldgrau* woollen cloth – black for *Panzer* troops –. This woollen cloth was a mixture of wool and fibre in a proportion that varied depending on the type of garment or on the year when it had been manufactured. Thus, depending on the type of garment, an ordinance of September 1936 established the following percentages of wool: *Waffenrock*, 80%; *Feldbluse*, 90%; trousers, 100%; caps, 70%.

During World War II these percentages varied to introduce more fibre, while pure wool was substituted by recycled wool. This meant that the quality of garments suffered and the texture and colour of the woollen cloth changed. In fact, the shade of *Feldgrau* evolved from

the bluish green of 1939 to the characteristic greenish brown of the end of the war.



Soldiers wearing Austriian Army tunics. (A. González)

In tunics and greatcoats, the dark *Feldgrau* and dark emerald green collars were made with a thinner and softer woollen cloth than the rest of the garment. This woollen cloth which was called "badge cloth", was also a mixture of wool and fibre.

Some issue garments were made of gabardine or drill. Gabardine, which was equally a mixture of wool and fibre, was used for peaked caps. Drill – a strong material made of twilled linen or cotton – was used to make tunics and trousers which at first were only used with the Fatigue Uniform, but which later was also used with the Field and Service Uniforms.

Until 1941 the lining of tunics and greatcoats was made of grey-brown cotton fabric. Since that date, grey or grey-brown synthetic silk also started to be used.

The lining of peaked caps was always orange brown. Trousers were usually lined with white cotton fabric.

MARKING

All issue garments were marked on the inside with different information. Most often this information referred to the Clothing Depot, the sizes and the maker.

Clothing Depot

Before World War II there were five Clothing Depots located in Berlin, Erfurt, Munich, Konigsberg and Hanover. When the war began, new ones were set up in Frankfurt, Stetin, Stuttgart, Breslau, Cologne and Koblenza, plus existing depots in occupied countries.

Makers put a paper label in the inside of the garment to register their name and the size. Then, in depots, this information was stamped on the

Marks and labels on equipment and tailor-made garments.



A



B



C



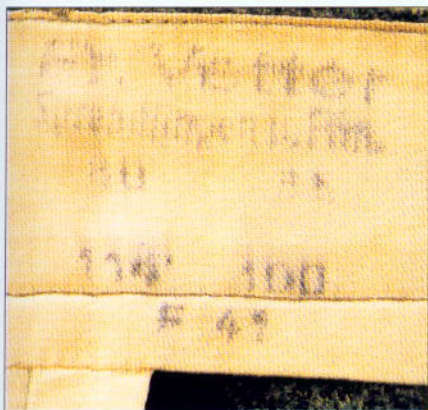
D



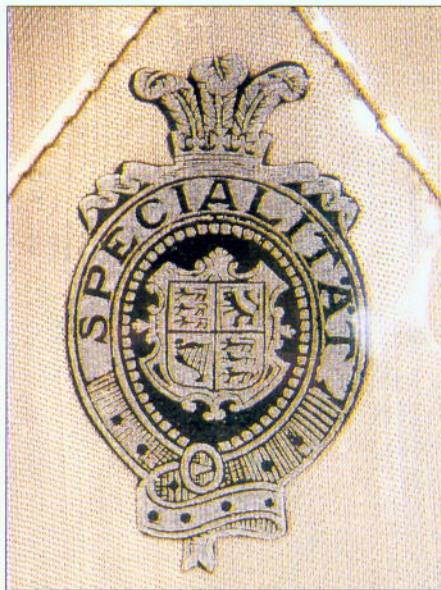
E



F



G



H



I



J



K



L

lining with black or dark blue paint or indelible ink. The initial or the two first letters of the name of the city where the depot was located were also stamped, as well as the last two digits of the year in which the manufacturer had delivered the garment

to the Army (A, B and C). Thus, for example, a tunic marked *M44* had been delivered to the Munich Depot in 1944.

Sizes

The measurements of the garment – in centimetres – were also stamped on the lining with black or dark blue paint or indelible ink.

For tunics and greatcoats, there were usually five sizes, stamped on the lining, on the right, in the chest area. These five sizes referred to the length of the garment, the width of the back, the length of the sleeve and the circumference of the neck and the chest (A, B and C). For peaked caps, caps and other headgear, the size was indicated by one single number (F). Trousers were marked with four sizes on the white lining inside the waist (G).

Manufacturers' details

Details referring to the name of the manufacturer were stamped at

the depots with indelible ink above the sizes (A, B and C), although sometimes they were stamped on the pocket where the first-aid kit was stored (D and E).



enemy from obtaining information about German industrial production, names were coded by means of three series of numbers separated by slashes and preceded by the letters *RBNr*, an abbreviation of the German word *Reichsbetretebsnumber* – for example, *RBNr 0/0966/000 – (C)*.

However, the production of Army clothing was not only undertaken by the great textile industries. It was also commissioned to small and medium manufacturers which sometimes gathered together into cooperatives. Garments manufactured by these cooperatives were marked with the word *Lago* (B).

Peaked caps were marked with the details of the manufacturer on the inside leather band (I).

II. TAILOR-MADE GARMENTS

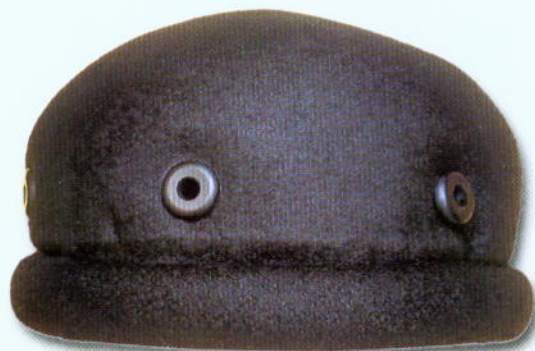
Officers had to pay for all their uniforms and they could purchase them at the barracks, tailors or the Army Clothing Office (*Heeres-Kleiderkasse*) in Berlin³. To compensate for this expense, the Army paid them, together with their wages, the so-called "clothing bonus".

Also, and despite the fact that they were completely equipped by their units, NCOs and privates could pur-

Until late 1942 the name of the manufacturer and of the city were mentioned in full – for example, *Knage & Peitz* –. However, since that date, and so as to prevent the



Peaked cap for NCOs and Artillery troops. The national emblem is of the first model. The band is dark Feldgrau. The oak leaves belong to the model in force between 1920 and 1935. In the photograph above, a soldier wearing a similar cap. (A. González)



In November 1934 the Schutzmütze was included for the first time in the equipment for tanks. This was a garment worn on the head and made up of an inner helmet and an outer cover that made it



look like a big black beret. At the beginning, it only bore an orle of oak leaves and a cocarde with the colours of the Reich. However, in October 1935 the national emblem was added to this. For officers it was woven or embroidered with aluminium thread over a black background, and for NCOs and privates it was woven with white cotton thread or, later, grey thread over a black background. The leaves were made of metal, although later they were substituted by others which were machine-woven with cotton thread. The equipment for self-propelled artillery and assault guns also included this beret, but made of Feldgrau woollen cloth.

(J.O. Rodriguez)

chase almost all garments and complements that made up the Walking-out Uniform in the same stores as officers.

FABRICS

Most tailor-made garments were made of gabardine or woollen cloth. The latter could be the same as the one used for issue clothing, or better quality. In this case there were two possibilities: combed or carded wool.

Likewise, there were tunics and trousers made of a gabardine which was lighter than the usual one, or of *Moleskin*, a *Feldgrau* washable cotton fabric, but of a much lighter shade than other fabrics. Officers could also use



Artillery Officer with the Feldmütze alter Art. (A. González)

pockets of all tunics and greatcoats there was usually another label with the details of the manufacturer and the name and rank of the purchaser (L). This second label was put in by tailors to keep a better record of their orders.

Tailor-made clothing had to pass a control in every unit so as to preserve uniformity and guarantee its quality. Once the garment had passed this test it was marked with the details of the unit and the word *Geprüft* or Controlled (K).

III. REQUISITIONED MATERIAL

The Wehrmacht used material requisitioned from other armies. This was not only done with vehicles and armament, but also with clothing and equipment. Thus, thousands of Dutch Army tunics were modified so they could be adapted to the German Army. Garments from the French, Austrian and Czech armies underwent the same process.

Requisitioned fabrics were also used, especially Italian woollen cloth. This is why it is quite frequent to find tunics and trousers made of this material.

This type of clothing was mainly assigned to rearguard units or units made up of foreign volunteers.

IV. HEADGEAR

The peaked cap and the steel helmet are perhaps the most representative garments of the German soldier. However, other garments are equally characteristic, although they are less well known, and many mistakes are made when trying to identify them.

white cotton tunics in summer and spring.

Linings were usually made of rayon - artificial silk - in green, grey or brownish grey.

MARKING

The most frequent marks on tailor-made garments were those referring to the manufacturer, whose name and address appeared on a label which was sewn to the lining of tunics (J), trousers and greatcoats, or under the celluloid diamond on the inside of all peaked caps (H). Likewise, inside the inner



Detail of the insignia worn on a Feldmütze alter Art of the 17th Infantry Regiment. The national emblem and the oak leaves with the cocarde are machine-woven with aluminium thread. (A. González)

In this section we will focus on all the headgear used by the *Heer* between 1933 and 1945. To this effect we have organised the information in chronological order, accompanying each of them with a text that describes its characteristics and explains all its modifications. These modifications were not always in keeping with the regulations, as many men transformed their garments to make them more comfortable or, simply, more flattering. It was issue garments that were most often subjected to modifications, as privately purchased garments were already adapted by tailors to the preferences and physical peculiarities of each person and to the existing regulations for uniforms.

The transformation of garments, together with the great variety of models and the habit of the German Army of reusing material from other armies are some of the reasons why there was less uniformity in the *Wehrmacht* than what is usually expected. Also, there is a widespread cliché about German soldiers never breaking the regulations. In other

aspects related to the militia this might have been so, but in terms of uniformity it is absolutely false. If we add the fact that there were many different shades of *Feldgrau*, that often the fabrics used to make uniforms belonged to other armies and that, even amongst privates, it was very usual to wear tailor-made garments, it is clear that uniformity must have been affected.

THE STEEL HELMET

Since 1918, the German Army used two different types of steel helmets (*Stahlhelm*) which were adopted during the Great War; we are referring

to the 1916 and 1918 models, which, despite some differences, were very similar.

In 1931 these helmets were given a new lining. Despite this, by then they were completely phased out, so a few years later research was undertaken to substitute them for a new

The old style field cap or Feldmütze alter Art was a peaked cap with no reinforcement which was only used by officers. (A. González)



Officers of the 10th Infantry Regiment. Germany, 1936. The officer which is third from the left is wearing a 1920 Feldmütze. This garment was used by all ranks and troops; the rest are wearing the Feldmütze alter Art. (A. González)

model. The result was the 1935 Steel Helmet, which remained virtually unaltered until the end of World War II.

Although this helmet was adopted in May 1935, it was not massively distributed until 1937. It was made of steel sheet painted shiny dark green and it was lighter than the preceding models. It had a ventilation opening on either side, a leather chinstrap and, inside, the lining introduced in 1931. This was a piece of leather with an aluminium frame which was held onto the helmet by means of three rivets.



NCO of a mountain troops unit wearing the Bergmütze. (A. González)

Germanic coat of arms in black with an eagle with folded wings on top, holding a swastika with its claws. On the opposite side of the helmet, below the other ventilation opening, there was another transfer with the Reich colours.

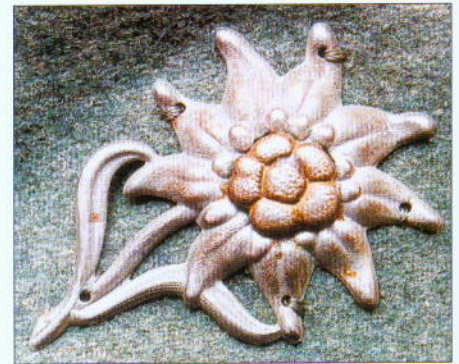
The helmet suffered a first modification in March 1940, when the ventilation openings were drilled directly onto the steel sheet rather than on a separate piece, which is how it had been done until then. The colour also changed to a matte dark green.

In any case, helmets were continuously repainted, so there are infinite variations.

An order was issued on 21st March 1941 by which helmets were to be manufactured without the coat of arms with the Reich colours, and this same insignia was to be eliminated from all hel-

metts already in use. In any case, this order was not always complied with and many soldiers carried on wearing the tricolour insignia until the end of the war.

The next modification was introduced in 1942, when the edges of the helmets were no longer folded inwards. The last modification dates from August 1943, when an order abolished the use of the transfer with the eagle from both newly manufac-



Detail of the metal Edelweiss for the Bergmütze. (Private collection)

tured helmets and those that had already been issued. However, just as what happened with the other insignia, many soldiers carried on wearing this transfer on their helmets until the end of the war.

Two of these rivets were on the sides and the third one was on the back.

As opposed to other helmets, like for example the North-American M-1, the lining did not fit all head sizes, so it was manufactured in five sizes. Logically, as the size of the lining changed, so did the size of the helmet, which was also manufactured in five sizes.

The size of the helmet was engraved on the inside of the right wing. The size of the lining was stamped on the leather with black indelible ink, whereas the manufacturer's marks were stamped on the inside of the helmet with that same ink.

On the left side, below the ventilation opening, there was a transfer with the german national emblem: a



NCOs wearing the 1934 Field Cap. (A. González)

Caps with a visor or peaked caps

This piece of headgear, called Schirmmütze – literally cap with a visor or peak, and which we will call peaked cap – was used by all ranks and troops. The Army issued this garment to NCOs and privates, but officers had to purchase it themselves from a hatter or from the *Heeres-Kleiderkasse*. Privates and NCOs who wished to do so could also purchase their caps from these outlets.

The top of issue peaked caps was always made of dark *Feldgrau* gabardine. Tailor-made peaked caps could be made of this same fabric or of woollen cloth of different qualities.

Until September 1935 the band on the peaked cap was dark *Feldgrau*. Since that date, and until the end of the war, it was dark emerald green.

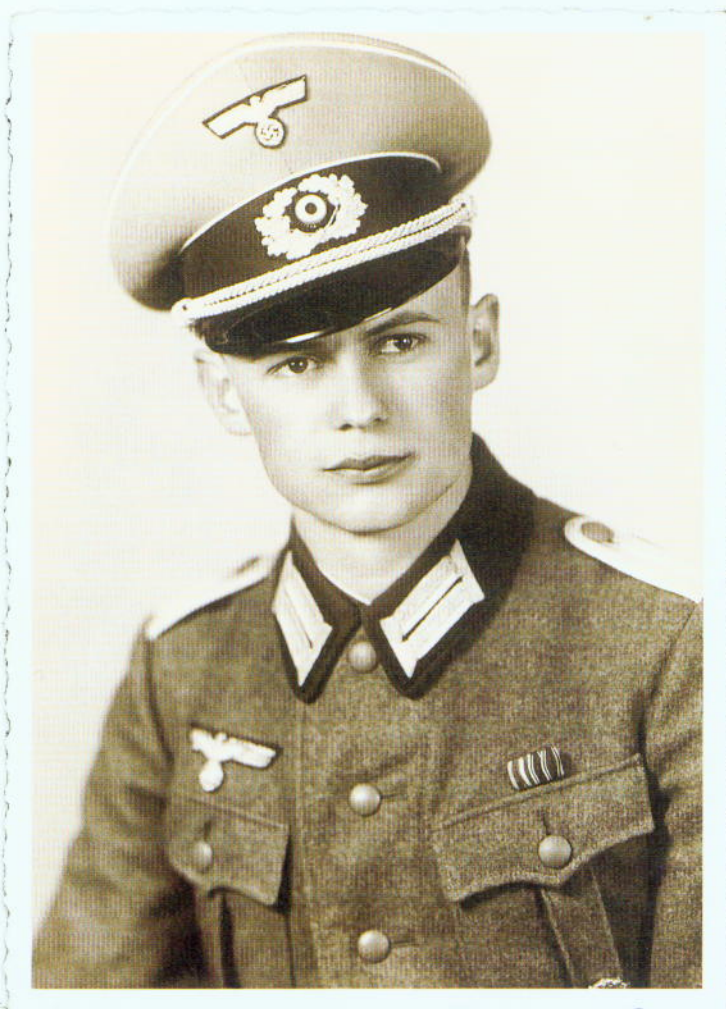
The chinstrap on officers' caps was made of two cords linked with two slides. These cords were made of silver thread or aluminium thread, since 1935. The chinstrap for marshals and generals was made of metal gilt thread.

Peaked caps worn by NCOs and privates had a black patent leather chinstrap. The chinstrap was secured to the band by means of two plain buttons painted black. Officers had silver buttons – gilt for marshals and generals – and the surface was grainy.

The top of the cap and the edges of the band of all caps were piped with the Arm-of-Service Colour. However, the piping worn by marshals and generals was always gilt.



Bergmütze. *The national emblem and the cocarde, woven on a T-shaped base have been substituted.*
(A. González)



Schirmmütze for an Infantry officer with hand-woven emblem and oak leaves. (A. González)

The peak was made of lacquered vulcanised fibre. The outside was black and the inside depended on whether it was an issue or a tailor-made garment. In the first case it was usually painted ochre yellow, whereas in the second case it was brown or not painted at all.

All caps bore the national emblem and an orle of oak leaves around a cockade with the *Reich* colours. These emblems were always made of metal for NCOs and privates, whereas officers could combine them in the following way: embroidered national emblem and oak leaves; metal national emblem and oak leaves; metal national emblem and embroidered oak leaves.

The national emblem and the oak leaves were

silver, except for marshals and generals, who, since 1943, started to wear gilt versions. Silver was still used for the other ranks and privates.

Issue peaked caps were lined with orange brown cotton fabric and they had a brown leather band inside. Tailor-made ones were usually lined with synthetic silk and both the lining and the leather band were ochre yellow or grey.

All peaked caps had a sheet of transparent celluloid inside. In tailor-made caps, the stamp of the *Heeres-Kleiderkasse* or of the hatter where the garment had been purchased was always under this piece of celluloid. The only information found under the celluloid on issue caps was the size, which was stamped with indelible black ink. The manufacturer's stamp, which was also in black ink, was hidden under the interior leather band.

FIELD CAPS AND PEAKED CAPS

This denomination, in German *Feldmützen*, includes several types of headwear.

1920 Field Cap

It was adopted in 1920. It was used by all ranks and privates. It was completely made of woollen cloth. The peak and the top were *Feldgrau* and the band was dark *Feldgrau*. It bore a cockade with the *Reich* colours. The top had dark *Feldgrau* piping and it was lined with white cotton fabric. This same fabric was used to line the inside of the peak.



Front and back of a weisse Rock neuer Art.
(C. Plaza)



1934 Field Side Cap

In 1934, the garment we have just described was substituted with a side cap which was only used by NCOs

and privates. Officers adopted a non-armoured peaked cap which is described in another section.

This cap was made of *Feldgrau* woollen cloth and it had ventilation openings on either side. It had two buttons on the front and chevron making a ninety degree angle. Above the vertex of this angle, which could vary in colour depending on the Arm-of-Service, there was a metal cockade with the *Reich* colours. The lining was made of brownish grey cotton fabric.

1935 Field Side Cap

In 1935, the 1934 model was modified. The main changes affected the insignia: the two buttons disappeared, and a machine-woven cockade was put in their place. Over it there was an angle in the Arm-of-Service colour. The chevron and cockade were substituted with a machine-woven German national emblem.

This cap was completely made of *Feldgrau* woollen cloth, except in the case of Panzer troops, whose cap was black⁴. The lining was made of brownish grey cotton fabric.

In July 1942 an order was issued by which these side caps had to be manufactured without the chevron in the Arm-of-Service Colour. A few months later, in September, another order was issued to eliminate the angle from all caps in use.

Old Style Field Cap

It was called *Feldmütze alter Art* or *a/A* and it was introduced in 1934. It was a non-armoured peaked cap only used by officers. It did not have a chinstrap,

and the national emblem, the oak leaves and the cockade were all machine-woven. The top was usually made of woollen cloth. The band was dark *Feldgrau* and, since September 1935, it was dark emerald green. The top and the band had piping with the Arm-of-Service Colour. Depending on the manufacturer, the peak could be made of patent cardboard or leather. The inside was similar to that of tailor-made peaked caps.

1938 Field Side Cap

Since 1938, officers had to use this garment instead of the *Feldmütze a/A*. It looked similar to the 1935 model, but the materials used both for the cap and for the insignia were usually better quality.

This cap was *Feldgrau* although there was also a black woollen

cloth variant for *Panzer* troops. The top and the front had aluminium thread piping, which was gilt for field marshals. The lining was usually made of ochre yellow synthetic silk.

Also in this case, an order in 1942 eliminated the angle in the Arm-of-Service colour both from newly manufactured caps and from those already in use.

1942 Field Side Cap

It was adopted in 1942 for privates and NCOs, and it was also



Feldbluse made of Moleskin, a Feldgrau cotton fabric which faded out when it was washed. (Intaria)

used by some officers. It had two buttons painted in *Feldgrau* and a machine-woven national emblem and cockade. It was lined with brownish grey cotton fabric.

THE MOUNTAIN CAP

This cap, which was called *Bergmütze*, was manufactured until 1943. It was part of the uniform used by all men destined in units of Mountain Hunters (*Gebirgsjäger*). These men could use issue caps or tailor-made caps, but most often officers used the latter and NCOs and privates used the former.

It was made of *Feldgrau* woollen cloth and it had two brown buttons made of paste. It had a small ventilation opening on either side. The inside of the peak was reinforced with leather or cardboard. The national emblem and the cockade were machine-woven on a T-shaped underlay. On the right it had a metal *Edelweiss*, the badge that identified Mountain Hunters.

Issue garments were lined with brownish grey cotton, whereas tailor-made ones were lined with ochre yellow or grey synthetic silk.



Gefreiter with a 1933 issue Feldbluse. It has five buttons and dark Feldgrau collar and shoulder straps. The patch pocket has accordation pleats and a pointed flap (A. González)

1943 FIELD CAP

In June 1943, an attempt was made to unify the use of peaked caps and field caps by adopting this garment (*Einheitsfeldmütze*), which had to be used by all personnel and all the Corps and Arms of Service of the *Heer*.

It was very similar to the *Bergmütze*, but there were some differences. First, the national emblem and the cockade were machine-woven on a triangle instead of a T, as was the case with the *Bergmütze*. Also, it had no ventilation openings and the buttons were made of metal.

Officers' caps were piped at the top with silver aluminium thread, or gilt for marshals and generals. Issue garments were lined with brownish grey cotton fabric,

whereas tailor-made garments, which could be made with woollen cloth or gabardine, were lined with fabrics of different colours and qualities. Most often they were lined with black synthetic silk.

A modification which was not in keeping with the regulations but which was, nonetheless, very common, was to take out the ring that armed peaked caps, so that they became floppy. Also, to make them



Black caps were manufactured for Panzer troops.

Soldiers wearing their Parade Uniform. Note the *Waffenrock* with white piping worn by the Infantry. (A. González)

MODIFICATIONS IN THE HEADGEAR

As we noted at the beginning of this section, modifying issue garments was a widespread habit in the *Wehrmacht*, especially amongst men of rank.

One of the most usual modifications in keeping with the regulations was the transformation of side caps and peaked caps for privates and NCOs into garments for officers. This was done by sewing the silver aluminium or gilt thread piping on the right place.

look more like *Feldmützen alter Art*, some officers changed the metal or embroidered insignia for machine-woven ones.

It was also common to sew chevron in the Arm-of-Service Colour onto the cap when caps began to be manufactured without it.

V. TUNICS

The German Army distinguished five types of tunic, which were called *Rock*, *Feldbluse*, *Waffenrock*, *Feldjackette* and *Drillichrock*⁵.

ROCK

In 1933 the *Heer* regulation tunic was called *Rock*. This garment was used by all the ranks and the men, but officers had to buy theirs from a tailor or at the *Heeres-Kleiderkasse*. It was made of *Feldgrau* woollen cloth or gabardine. The collar was made of dark *Feldgrau* "badge cloth". It had eight buttons and four pockets: the ones at the top were pleated patch pockets with a pointed

Waffenrock for a private, transformed into a Field garment. The collar and cuffs have been substituted with others of the same material used for the rest of the garment. The buttons, shoulders straps and insignia have also been changed. (J.O. Rodríguez)



flap and the lower ones were hidden and also had a pointed flap.

The cuffs were turned up. The back had three seams: the one in the middle went from the waist to the lower edge of the collar; the side seams went down from the shoulders, making a curve at their upper end and were interrupted by two buttons that held the belt in place.

In October 1928 the number of buttons was reduced to six, although tunics with eight buttons were still in use.

In September 1935 an order was issued by which all tunics – both garments manufactured from then on and existing ones – had to have a dark emerald green collar instead of the dark *Feldgrau* collar which had been used until then.

There was a variation made with *Feldgrau* cotton fabric which was only used in summer. In this case, the collar was the same colour and the same material as the rest of the garment and it had no lining.

Piped Rock

In 1927 the collection of regulation garments grew with the inclusion of this tunic. It was similar to the *Rock*, but the front was decorated with Arm-of-Service Colour piping. It could only be purchased from tailors or from the Army Clothing Office.

For officers this garment was compulsory and it was called *Society Rock* or *Gesellschaftsrock*. For privates and NCOs it was called *Walking-out Rock* or *Ausgehrock*, and its use was optional.

In both cases, as was the case with the other tunics described here, since 1928 the six-but-

Artillery Officer.
He is wearing an issue *Feldbluse* with a collar which is bigger than the original, in keeping with regulations.
(A. González)

ton and eight-button variants co-existed. Likewise, in September 1935 an order was issued by which collars had to be dark emerald green.

White Rock

This garment, which was not compulsory, was only



Ausgehrock belonging to an Infantry NCO. The front is piped with the Arm-of-Service Colour.
(Private collection)

used by officers between 1st April and 30th September. It was purchased from the Army Clothing Office or from tailors. There were two variants: the Old Style white *Rock* or *weisse Rock alter Art* and the New Style white *Rock* or *weisse Rock neuer Art*.

- *Weisse Rock alter Art*: it was made of white cotton fabric. It had six buttons, four pockets and the collar was not folded over. The pockets at the top were pleated patch pockets with a pointed flap and the lower ones were hidden and also had a pointed flap. It had no lining. The buttons, national emblem and shoulder straps were removable to make the garment easier to wash. It had no emblems on the collar.

- *Weisse Rock neuer Art*: in 1937 a new model was introduced. The collar of this



Above, a break after the battle. Below, the MG-34 was the first machine gun for general use, as it could be used as a lightweight, heavy or anti-aircraft weapon. (J. León)

model was folded over, as were the cuffs. All the pockets were pleated patch pockets with a pointed flap. It had eight buttons instead of six.

FELDBLUSE

In the spring of 1933 the German Army decided to substitute the *Rock* with a new tunic which it called *Feldbluse* or *field tunic*.

At first this measure only affected issue garments. However, since March 1936 it also affected tailor-made tunics. Nevertheless, the introduction of the *Feld-*

bluse did not bring with it the end of the *Rock*, because, as we will immediately see, German military men carried on wearing all variants of the latter.

As a matter of fact, privates and NCOs carried on wearing the *Rock* until all stocks were exhausted. Moreover, an order dated May 1937 allowed officers who had purchased a *Rock* before March 1937 to carry on using them,

although it established a deadline on 1st April 1942. This same order said that officers were allowed to carry on wearing the piped *Rock* until 31st March 1939, unless it was transformed into a *Rock*, in which case the deadline was the 1st April 1942. These periods of time were also established for the piped *Rock* used by privates and NCOs. The piped *Rock* was transformed into a *Rock* by eliminating the piping with the Arm-of-Service Colour.

Marshals and generals were the only ones allowed to carry on wearing the *Rock* without a time limit.

Issue Feldbluse

It was used by the whole Army, but officers had to modify it according to the regulations; these modifications will be studied in the corresponding section.

It was made of *Feldgrau* woollen cloth. The collar was dark *Feldgrau*. It had five buttons and four pleated patch pockets with pointed flaps. The back of the cuffs had an opening with buttons. The lining was made of brownish grey cotton and it only cov-



ered the shoulders and part of the chest. Inside there were two cords which could be used to regulate the size of the waist, a pocket to keep the first-aid kit and, on the collar, there were five buttons to hold a false collar. The tunic also had two removable braces that held some metal hooks to keep the belt in place.

In September 1935 this garment suffered a first modification when the colour changed to dark emerald green. Other modifications followed that changed its appearance. In December 1936 the waist cords were eliminated and the lining was made to cover part of the back. During the spring of 1940 the collar was made of the same fabric as the rest of the garment for the same time. The following year the number of buttons was increased to six, the design of the lower pockets was modified, and the removable braces were substituted with four flaps which were directly sewn onto the tunic. During the autumn of 1942 the pleats disappeared from all pockets. Finally, in 1943, the flaps of the pockets became straight as, until then, the lower edge of the flaps had had three points which were not so marked.

1944 Issue Feldbluse

All these modifications, except for the addition of the sixth button, were aimed at cutting production costs. Still, the reduction was not enough, so in September 1944 a new, much cheaper, tunic model was introduced.

It was a short tunic, very similar to the British Battledress. It was made of brownish *Feldgrau*. It had six buttons and two breast patch pockets with no pleats and a straight flap. The opening at the back of the cuff was maintained, although there were some variations in the arrangement of buttons and buttonholes. It had two inner pockets. The lining was usually made of grey synthetic silk, and it only covered the shoul-



Above, a grenadier of the Grossdeutschland Division wearing the Drillichrock 42. Below, men and their company pet. (A.P.)





The drill tunic introduced towards the middle of 1942 as issue clothing for tank crews. Notice the large breast pocket. (S. Guillén)

ders. There were only two flaps at the back for the belt hooks. It did not have a pocket for the first-aid kit.

Some tunics manufactured in the last months of the war had no buttons on the outer pockets, no opening at the back of the cuffs and no inner pockets and flaps

Tailor-made Feldbluse

In March 1936 the decision to replace the *Rock* also affected tailor-made tunics. On that same date they were substituted by a *Feldbluse* which was specially designed for officers and which could only be purchased from tailors or from the *Heeres-Kleiderkasse*.

It was made with *Feldgrau* woollen cloth, gabardine or *Moleskin*. It had five buttons. The collar was dark emerald green and bigger than the collar on issue garments. It had four pleated patch pockets with pointed flaps. The cuffs were turned up and the inside was completely lined with greenish or grey synthetic silk, except for the sleeves, which were usually lined with striped or patterned white or yellow cotton fabric.

The only modification suffered by this tunic

took place in 1941, when the number of buttons increased to six.

Piped Feldbluse or Ausgeschmückte Feldbluse

In July 1937 a piped version of the *Feldbluse* was adopted. At first it

was intended for all Army members, but finally it was decided that only officers should use it.

It was a garment similar to the one we have just described, the difference was that the collar, the cuffs and the front were piped with the Arm-of-Service Colour. Until May 1941 it had five buttons, but since then it was manufactured with six.

WAFFENROCK

It was introduced in June 1935. This was the most important tunic of the German uniform. Its use was restricted to great events – parades, society events, etc. – and it was part of the collection of garments that the Army issued to NCOs and privates. Officers also used it, but they could only purchase it from tailors or from the *Heeres-Kleiderkasse*. Privates and NCOs who wished to do so could also purchase their tunics from these outlets rather than wear those issued by the military Service Corps.

Issue garments were made of woollen cloth, whereas tailor-made ones were usually made of gabardine. The cuffs and the collar were usually dark emerald green. It had eight silver buttons which were gilt for marshals or generals. The front of the tunic was decorated with piping in



the Arm-of-Service Colour⁷. There were two false pockets, which also had this piping, on the back. Tailor-made garments were usually lined with synthetic silk, whereas issue garments were lined with brownish grey cotton fabric.

FELDJACKE

It was issued to tank and self-propelled artillery crews. In the first case it was black, whereas for the rest of the troops it was made with *Feldgrau* woollen cloth.

It was a short crossed jacket which was fitted

Above, dark green Drillichrock. Below, loading an assault gun while wearing the Feldgrau Feldjacke. (Arganzuela)





This NCO bears badges on his Feldbluse sleeve as proof of the destruction of four enemy tanks. (A.G.A F-1363)



Gefreiter with the Iron Cross 2nd class decoration. He has turned his shoulder straps inside out to hide the regiment number. This was very frequent during the Poland campaign. (A. González)



In the German Army, the section made up of ten men commanded by an NCO, was the smallest group of fighters with an officer in charge. The photograph shows one officer, sitting down, talking to other section officers about the development of the operations. (A.G.A F-1273)

to give freedom of movement inside the vehicles. It had hidden buttons, an opening with buttons on the cuffs and two inner pockets.

At first, the collar of black *Feldjacken* was piped with the Arm-of-Service Colour. This piping was eliminated in 1940.

Towards the middle of 1942 a variation made in dark green drill was introduced. This variant had a large breast pocket on the left. This garment was issued to tank crews which had to use it as a fatigues or field garment during the summer. The tunics issued to armoured vehicle and reconnaissance crews were made of the same material, but did not have the aforementioned pocket.

DRILLICHROCK

It was introduced in 1933 as part of the fatigue uniform and it was only used by privates and NCOs. It was made of white drill, although this colour changed to dark green in 1940. It had two pockets, five removable buttons and no lining. It

An Oberstleutnant of the 131st Infantry Regiment and his two sons in a photograph of 1939. (A. González)



did not have collar patches or shoulder straps.

1942 DRILLICHROCK

Towards the beginning of 1942 the tunic we have just described was substituted with another one whose design was similar to that of the issue *Feldbluse*, only made of dark green drill.

This tunic had six removable buttons. The first ones had four pleated patch pockets with flaps. However, since the autumn of 1942 the pockets suffered the same modifications as those of the issue *Feldbluse*.

There was an inner pocket for the first-aid kit. The lining, which was made of grey or brownish grey synthetic silk only covered the area under the armpits.



Grenadiers in the Battle of Normandy. North of France, 1944. (Arganzuela)

MODIFIED TUNICS

A distinction must be made between regulation modifications and non-regulation modifications.

Regulation modifications

- Collars and Shoulder Straps: the order of September 1935 which introduced dark emerald green for collars and shoulder straps was retroactive. Thus, all tunics and great-coats manufactured before this date were modified by changing the dark *Feldgrau* collars and shoulder straps for others of the new colour.

- Issue *Feldbluse*: officers had to use the same tunic as privates and



Flexible high boots for officers.
(C. Plaza)

NCOs with their Field and Service Uniforms, but substituting the collar with a bigger one. This collar was used by officers with all their tunics, and by NCOs and privates with the *Waffenrock*. However, this rule was not always complied with. In fact, in graphic documents of the time, it is common to see officers wearing unmodified issue *Feldblusen*.

- *Waffenrock*: In March 1940 the issue *Waffenrock* was discontinued, and those that had already been delivered had to be turned into service or training garments. Such was the case with the officer *Waffenrock*, so officers had to get theirs modified by a tailor to turn it into a tunic similar to the *Rock*.

The transformation of the issue *Waffenrock* into a ser-

vice or training garment was achieved by eliminating the numbers and the letters from shoulder straps and the double braids from the cuffs.

During the war, many issue *Waffenrock* were converted into field tunics which were later given out to rearguard units and units made up of foreigners. In this case the transformation meant substituting the silver buttons with *Feldgrau* buttons, the dark emerald green collar and cuffs with others of the same colour as the rest of the garment and the shoulder straps and insignia with those used with the issue *Feldbluse*.

Non-regulation modifications

It was quite common for the ranks – especially officers – to transform their tunics to make them more flattering. These transformations were carried out by specialists in the unit or private tailors, who modified the garments according to individual taste.

The most frequent modification was substituting the *Feldgrau* collar and shoulder straps with dark emerald green ones. Sometimes, though,

there were more radical transformations, such as shortening the garment or modifying the design and position of the pockets.

V. TROUSERS

A distinction must be made between issue and tailor-made trousers, but also between trousers (*Hose*) and breeches (*Reithose*).

STRAIGHT TROUSERS

There were several models and variants:

1936 Issue Trousers

These trousers were made of grey woollen cloth. They had two hip pockets, one on the back and a smaller one on the front. They also had an adjustable strap on the back. The waist and the pockets were lined with white cotton fabric. The flies flap was lined with grey or brownish grey cotton fabric.

The variant worn with the *Waffenrock* and the piped *Rock* also had piping in the Arm-of-Service Colour.

1940 Issue Trousers

Introduced in 1940, the only difference between this model and the previous one was that this one was made of *Feldgrau* woollen cloth. In this case there was no piped variant.



In 1940 marching boots were substituted with lace-up ankle boots worn with greenish canvas gaiters.
(M. Álvaro)

Trousers for Mountain Hunters

These were of the "Norwegian" type. At first they were grey, but in 1940 this colour was substituted by *Feldgrau*. It had the same number of pockets as the previous two models, but all of them had flaps. The crotch was reinforced and it had two adjustable straps, one on either side of the waist. The cuffs were adjusted to the ankles by means of leather or fabric straps. The lining was made of white cotton fabric, except for the flies flap which was grey or brownish grey.

1943 Issue Trousers

This model, introduced in 1943, was inspired in the model we have just described. They were to be used by all Army units, including Mountain Hunters.

They were also of the "Norwegian" type and they were made of *Feld-*

grau woollen cloth. They had two hip pockets, one on the back and a watch pocket with a flap on the front. They also had four belt straps on the waist, an adjustable strap on either side and a reinforced crotch. The cuffs were adjusted by means of fabric straps. The waist and the pockets were lined with white cotton fabric, whereas the flies flap and the flap on the watch pocket were lined with grey or brownish grey fabric.

NCO of the 42nd Infantry Regiment. He is wearing straight issue trousers and marching boots. (Arganzuela)



In 1933 an attempt was made to substitute the marching boot with the Schnürstiefel, lace-up footwear with straps to be used with Field and Service Uniforms. (A. González)

1944 Issue Trousers

Compared with the 1943 model, this one had an extra back pocket, all pockets had flaps and the belt straps were narrower. The *Feldgrau* woollen cloth was slightly brownish. The lining was the same as in other models.

Trousers for armoured units

Tank, assault gun and self-propelled artillery crews used "Norwegian" style trousers – black for tank crews and *Feldgrau* for the rest –. These

trousers had two back pockets, two side pockets and a smaller front watch pocket. All pockets, except for the latter, had flaps. The waist was



BREECHES

They were used by mounted officers, NCOs and privates.

ISSUE BREECHES

They were issued to mounted privates and NCOs, although they were also used by many officers and NCOs who did not ride a horse with both their Field and Service Uniforms.

There were three models which, except for the shape of the legs, were similar to the three straight trousers described.

Tailor-made trousers

In this case there were also many variants made with grey or *Feldgrau* woollen cloth or gabardine.

VII. GREATCOATS

At first, issue greatcoats had dark *Feldgrau* collars. However, in September 1935 this colour was substituted with dark emerald green. In 1940 the collar became *Feldgrau* again, although tailor-made greatcoats maintained the dark emerald green colour.

All greatcoats were made of *Feldgrau* woollen cloth and had turned up cuffs, two pockets with flaps, adjustable back straps and two rows of six buttons each. The lining of issue garments only went down to the waist and it was made of brownish grey cotton or grey or brownish grey synthetic silk. Tailor-made garments were completely lined with grey, green or brownish grey synthetic silk.

There was a specially designed greatcoat for soldiers on guard. This

Above, an officer wearing tailor-made trousers. Below, tailor-made greatcoats. (Intaria)

adjusted with a belt and the cuffs were adjusted by means of cords. The lining was made of white cotton fabric, except for the flies flap, which was usually black.

Drill trousers

Drill tunics were worn with trousers of the same fabric. There were two models. The first one was made of white drill until 1940 and of dark green drill since that year and it was very similar to the 1940 model. The second model, introduced in 1942, was very similar to the 1943 model.

TAILOR-MADE TROUSERS

They were mostly used by officers. There were many variants made of grey or *Feldgrau* woollen cloth or gabardine, with or without piping.



garment had a hood, four pockets, cuffs with no turn-ups and grey or black felt lining which covered the whole inside.

VIII. FOOTWEAR

The marching boot or *Marschstiefel* is perhaps one of the most characteristic elements of the German soldier. Despite this, an attempt was made in 1933 to substitute it with a new boot – called *Schnürstiefel* – which had laces and straps and which was to be used with Field and Service Uniforms. The performance of the new boot was not good, so in 1935 the traditional marching boot was recovered, even though the *Schnürstiefel* was used by *Ersatzheer* soldiers until all stocks were exhausted.

The marching boot used by NCOs and privates who did not have a mounted post, was made of leather which was dyed black. The leg could be between 29 and 41 centimetres high. The sole had about 30 nails, depending on the size, the front was reinforced with a metal toe cap, and the heel had a U-shaped piece of metal. The aim of all this was to prevent the sole from wearing out.

Mounted personnel used similar boots, but the leg was narrower and higher – between 8 and 12 centimetres longer – , and the heel had a crescent-shaped leather piece for the spurs to rest on. These boots, which were called *Reitstiefel*, were also issued by the Army free of charge to privates and NCOs. However, photographs of the time show that many officers wore them with their Field and Service Uniforms.


When wearing the Walking-out Uniform or whenever other uniforms were worn with straight trousers not tucked into the boot, NCOs and privates



wore lace-up ankle boots. Later on, since 1940, this footwear was used to substitute marching boots in all uniforms, complemented with greenish canvas gaiters. These ankle boots had laces that were adjusted by means of a combination of metal eyelets and hooks. The sole was similar to that of the other two types of boots described above.

Officers had to purchase their footwear themselves and they could use, depending on the uniform they were wearing, high boots, ankle boots or booties which were usually purchased from private shoe-makers. Thus, there was a wide range of variation.

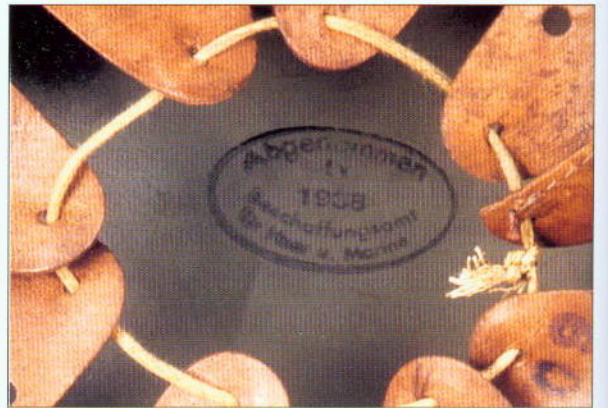
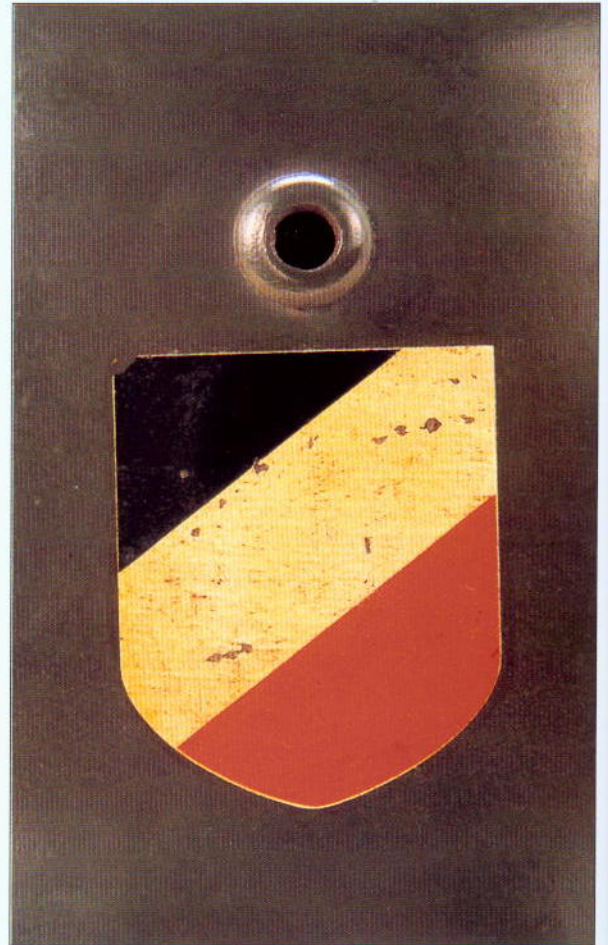
As for special footwear, mountain hunters used brown or black leather ankle boots – called *Bergschuhe* – which had a combination of metal plates and nails on their soles to improve their grip. These boots were used with *Feldgrau* bandages which were wrapped around the ankle.

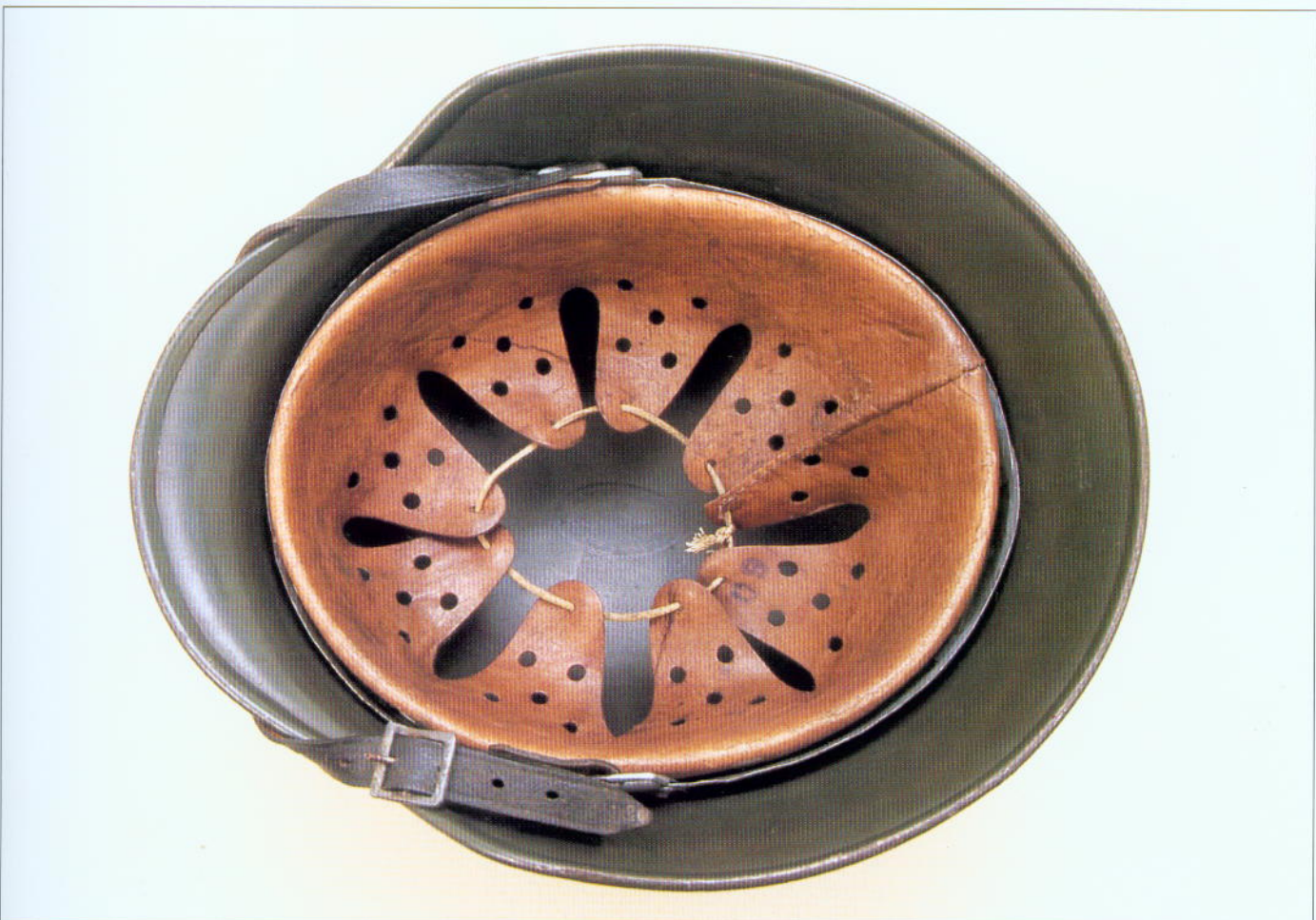
There was another type of special footwear which was used in winter on the Eastern Front. There were many variations but the most usual type was made of leather and felt. 

Officer wearing breeches. They are made with grey gabardine and the crotch is reinforced. (C. Plaza)

STEEL HELMET

The 1935 Steel Helmet was made of steel sheet and was painted shiny dark green. It had a ventilation opening on either side, a leather chinstrap and the lining adopted in 1931. (E. Delgado)





1



STEEL HELMET (II)

Since March 1940, the ventilation openings were drilled directly onto the steel sheet. Around that time the colour changed and became dark matte green. Later, since 1942, the edges were not folded inwards any more.

1. Example of a helmet manufactured after 1942. (A. Larios)

2 to 4. Example of a helmet manufactured after 1940. It is painted dark matte green. Below the ventilation opening, stamped directly onto the sheet is the transfer with the German national emblem. (Intaria)

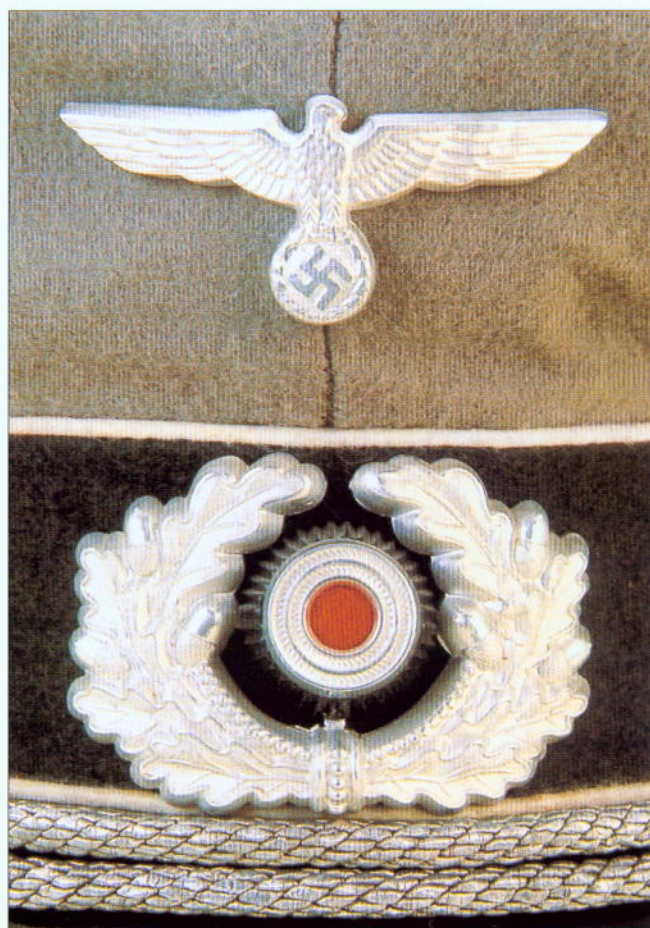




Hauptmann of the 130 Pz. Lehr Rgt. (C. Plaza)

PEAKED CAP

On officers' caps, the national emblem and the oak leaves could be combined as follows: embroidered national emblem and oak leaves; metal national emblem and oak leaves; metal national emblem and embroidered oak leaves. (Intaria)





PEAKED CAP (II)

Since 1943, caps worn by marshals and generals differed from the rest in that the national emblem and oak leaves were gilt. (AGA F-1272)

1. Peaked cap with gilt national emblem and oak leaves. (J.O. Rodríguez)

2 and 3. Until 1943 the national emblem and the oak leaves were silver, but the piping and the chinstrap were gilt. (A. González)





PEAKED CAP (III)

Peaked caps for NCOs and privates had a black patent leather chinstrap. The chinstrap was held onto the band by means of two plain buttons which were painted black. For officers these buttons were silver or gilt and their surface was grainy. (L. M. Sánchez)



1920 FIELD CAP

It bears a cocarde with the Reich colours. The peak and the top are made of Feldgrau woollen cloth, whereas the band is dark Feldgrau. The piping that goes around the top is of this same colour. It is lined with white cotton fabric. (E. Delgado)



OLD STYLE FIELD CAP

It was called Feldmütze alter Art or a/A and it was introduced in 1934. It was a non-armoured peaked cap only used by officers. It did not have a chinstrap, and the national emblem, the oak leaves and the cockade were all machine-woven. The top was usually made of woollen cloth. The band was dark Feldgrau and, since September 1935, it was dark emerald green. The top and the band had piping with the Arm-of-Service Colour. (A. Larios)





First shooter of a machine gun team. He is wearing a Feldmütze with the white piping used by the Infantry. (C. Fernández)

1935 FIELD SIDE CAP

It was only used by NCOs and privates. In July 1942 an order was issued by which caps had to be manufactured without the chevron with the Waffenfarbe. A few months later, in September, this chevron was discontinued from all garments in use. (Militaria Arganzuela)



1938 FIELD SIDE CAP

This cap was only used by officers. On the front and top it had silver aluminium piping - gilt for marshals and generals -. The order of 1942 also affected this cap, so it had to be manufactured with no chevron in the Arm-of-Service Colour, which also had to be removed from all caps in use. (C. Plaza).



Oberleutnant und Adjutant of the 7 Panzer Regiment. Poland campaign, 1939. (C. Plaza)

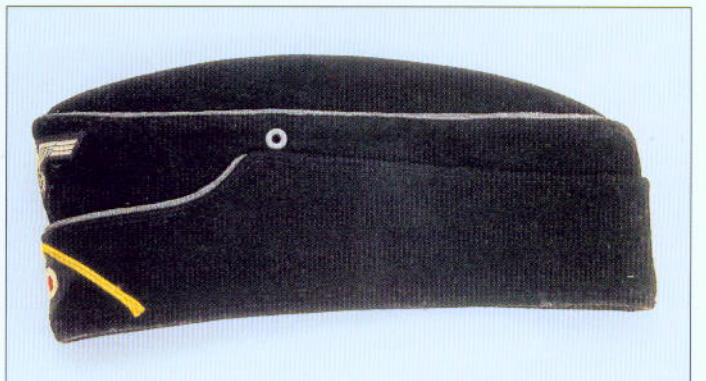




1938 FIELD SIDE CAP (II)

In January 1941 the Schutzmütze was substituted with the 1935 model - for NCOs and privates - and the 1938 model - for officers -, but made of black woollen cloth. (A. Larios and AGA-1272)





Officer of the 24th Panzer Regiment. Stalingrad, winter 1942-1943. (A. Larios)

1942 FIELD SIDE CAP

This model was introduced in 1942 for NCOs and privates, although some officers also used it. The difference between the 1935 model and this one is the flap which can be turned down to protect the soldier from the cold. The example shown here has a machine woven national emblem and cocarde on a T-shaped fabric underlay. This badge was usually restricted to the Bergmütze. (J. Escarré)



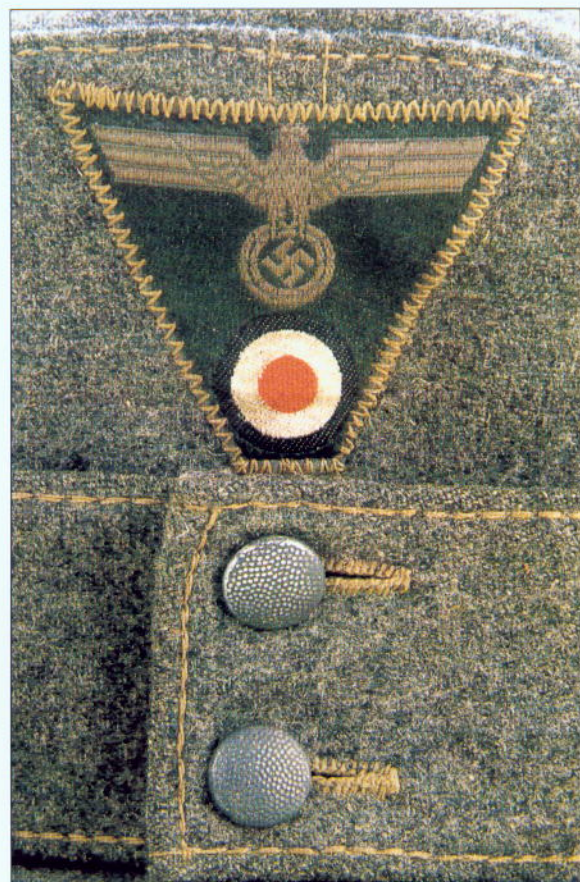




Panzergrenadier of the 2 Panzer Division. Normandy, 1944. (C. Fernández)

1943 FIELD CAP

It was very similar to the Bergmütze. The main difference was the fact that the national emblem and the cocarde on this one were machine woven on a triangle. Also, the peak was longer, it had no ventilation openings and the buttons were made of metal. Officer caps were piped at the top with silver or gilt aluminium thread. (C. Fernández)



1943 FIELD CAP (II)

For the troops of Armoured Divisions caps were made out of black woollen cloth. The example that appears here belongs to an official. The aluminium thread piping is the same as the one used to edge the tunics of the Luftwaffe, quite a frequent practice. (A. Larios)



THE MOUNTAIN CAP

It was made of Feldgrau woollen cloth and it had two brown buttons made of paste. It had a small ventilation opening on either side. The inside of the peak was reinforced with leather or cardboard. The national emblem and the cockade were machine-woven on a T-shaped underlay. On the right it had a metal Edelweiss, the badge that identified Mountain Hunters. (Intaria)



ROCK

It is made of Feldgrau cotton canvas, a fabric only used for summer. It has eight buttons and four pockets; the ones at the top are pleated patch pockets with pointed flaps, and the lower ones are hidden and also have a pointed flap. (J.O. Rodríguez and A. González)







ROCK (II)

It is made of gabardine fabric. The collar is dark emerald green. The cuffs are turned up. The back has three seams: the one in the middle goes from the waist to the lower edge of the collar; the side seams come out of the shoulders making a curve and then come down and are interrupted by two buttons which hold the belt in place.

(C. Plaza and A. González)



PIPED ROCK

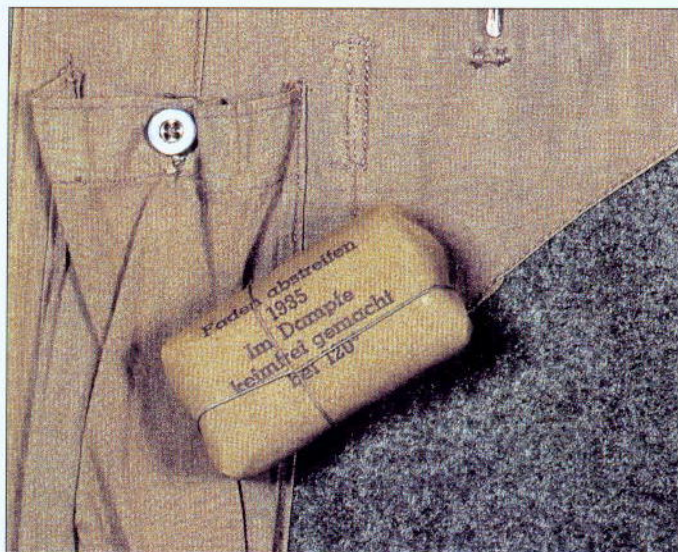
In 1941 marshals started wearing collar patches which were different from those worn by generals, as they had three arabesques. An order was issued in that same year, according to which marshals had to substitute their shoulder straps for others with only gilt braiding. However, this type of shoulder strap was scarcely used. (A. González)





ISSUE FELDBLUSE (1935)

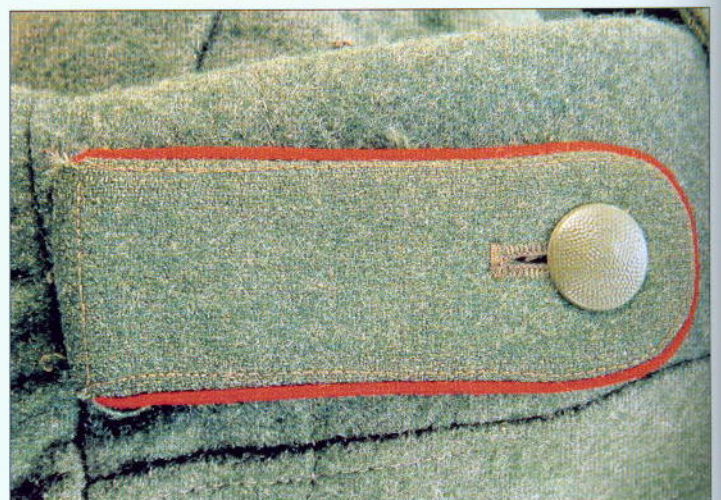
The collar is dark emerald green. It has five buttons and four pleated patch pockets with pointed flaps. The cuffs have an opening with buttons. There are some hooks for the belt on the waistline. The lining is made of brownish grey cotton. There is an inner pocket on the left for the first-aid kit. (Private collection and A. González)





ISSUE FELDBLUSE (1940)

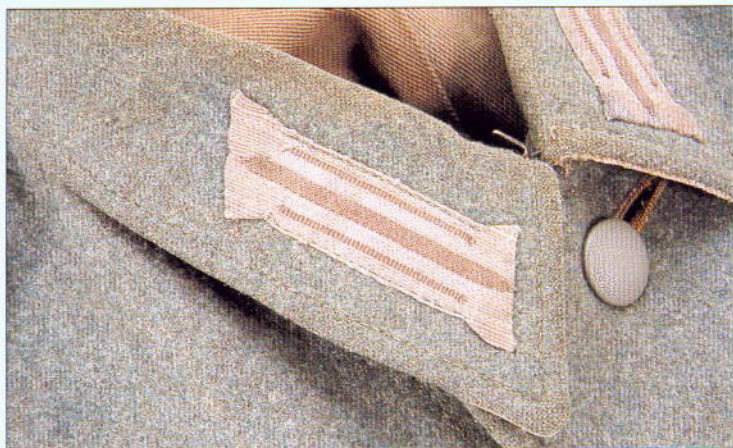
The collar is made of the same material and colour as the rest of the garment. It has five buttons and four pleated patch pockets with pointed flaps. On the inside we can see the five buttons that hold the false collar or Kragenbinde. (A. Pinilla and A.G.A F-1273)





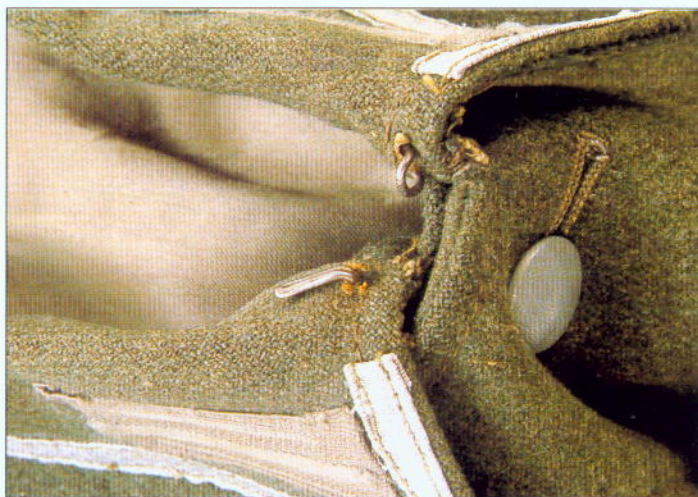
ISSUE FELDBLUSE (1941)

*It has four pockets and six buttons. The collar is the same colour and is made of the same woollen cloth as the rest of the garment. The first tunics had cotton lining, whereas in the last ones that were manufactured the lining was made of synthetic silk.
(C. de la Plaza and A. González)*



ISSUE FELDBLUSE (1942)

*The collar is closed with a metal hook. It has six buttons and four patch pockets with pointed flaps and no pleats. On the inside there are four cotton canvas flaps to hold the belt hooks, which come out through the holes around the waistline.
(G. López and Intaria)*

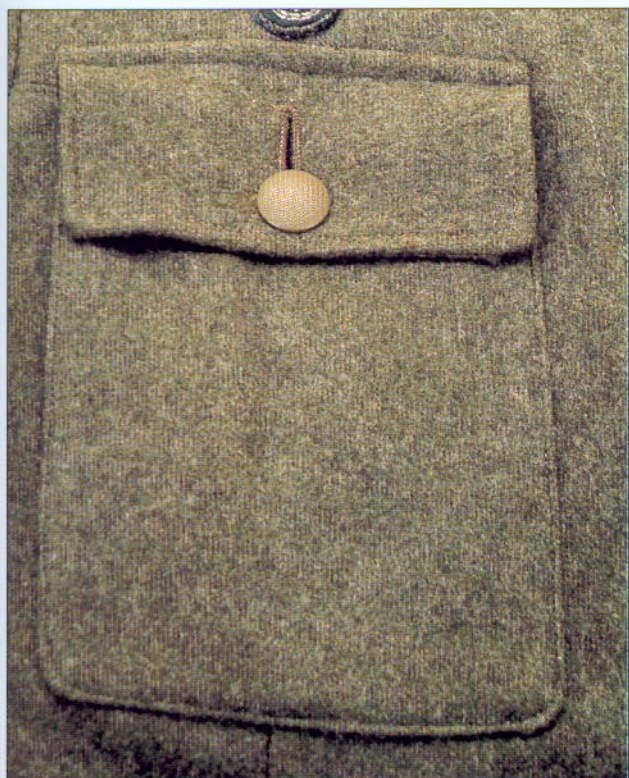




Panzergrenadier of the Grossdeutschland Division. (A.P.)

ISSUE FELDBLUSE (1943)

It is completely made of Feldgrau woollen cloth. It has six buttons and four patch pockets with straight flaps. The lining is made of brownish grey synthetic silk. (Fundación Don Rodrigo)



ISSUE FELDBLUSE (1944)

It is made of brownish Feldgrau woollen cloth. It has six buttons and two breast patch pockets with a straight flap. The opening at the back of the cuffs is maintained, but there are some differences in the arrangement of the buttons and buttonholes. It has two inner pockets. The lining, which is made of grey synthetic silk, only covers part of the shoulders. There are only two flaps for the belt hooks on the back. It does not have a pocket for the first-aid kit. (J. Escarré)





TAILOR-MADE FELDBLUSE (1936-41)

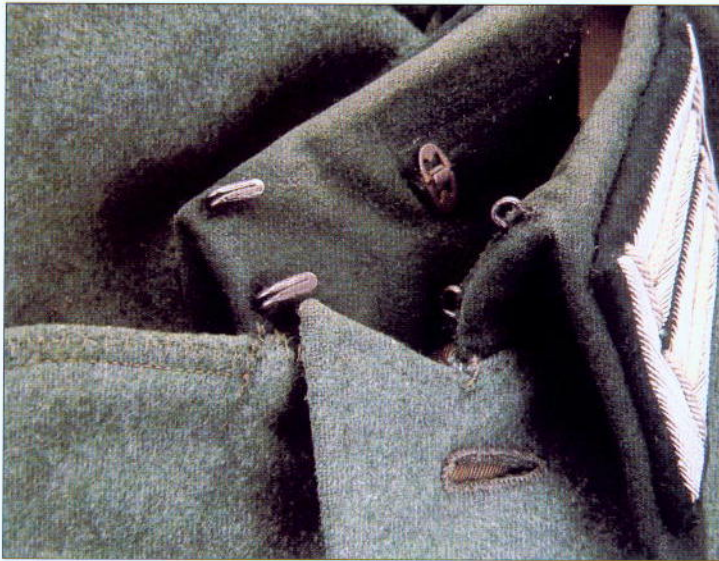
This tunic belongs to an Oberleutnant of the 537th Signal Battalion and it is made of Feldgrau gabardine fabric. The collar is dark emerald green. It has five buttons and four pleated patch pockets with pointed flaps. It has turned-up cuffs. (Arganzuela)





TAILOR-MADE FELDBLUSE (1941-45)

It has six buttons and it is made of Feldgrau woollen cloth. The collar is larger than that of issue garments, so it is closed by means of two metal hooks. The removable shoulder straps identify an Infantry Oberleutnant. The lining is made of brownish grey synthetic silk, except for the sleeves, which are lined with striped or patterned white cotton fabric. (L.M. Sánchez and Intaria)





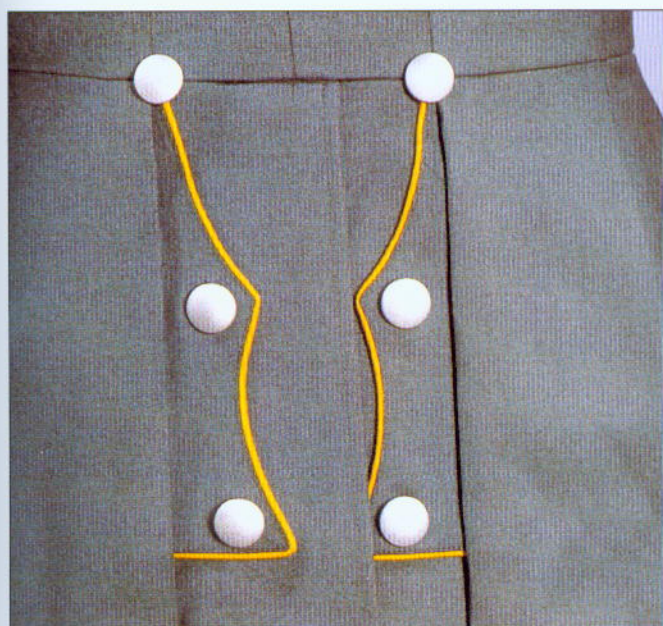
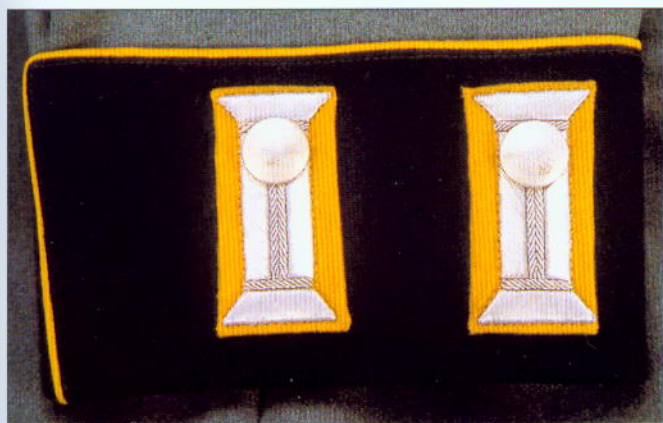
PIPED FELDBLUSE

This garment is similar to the tailor-made Feldbluse, but the collar, the cuffs and the front are piped with the corresponding Arm-of-Service colour. Until May 1941 they were manufactured with five buttons. This is the case of the example shown here. (Private collection)



WAFFENROCK

The front, cuffs and collar are piped with the Arm-of-Service Colour. This piping also decorates the false pockets on the back. The collar patches are embroidered with shiny aluminium thread on a golden yellow underlay. The two pieces of double cord on the shoulder straps are also made of shiny aluminium thread. (J.O. Rodríguez)



WAFFENROCK (II)

It is made of gabardine fabric. The collar and the cuffs are dark emerald green. It has eight silver buttons. The back has two false pockets and the same seams as the Rock. Also, there are two double braids similar to the ones on the collar on each cuff. (Arganzuela)





FELDJACKE

This tunic belongs to a Hauptmann of the Panzer Lehr Division. It is made of black woollen cloth. It has an opening on each cuff similar to that of issue Feldblusen. The buttons are hidden and it has two inner pockets. It is lined with brownish grey synthetic silk which only covers the front. On the inside, sewn onto the back, there are two flaps for the belt hooks. (C. Plaza)





Hauptmann of the 130 Pz. Lehr Rgt., Normandy, 1944. (C. Plaza)



FELDJACKE (II)

Assault guns and self-propelled artillery crews used the same tunic as tank crews, but made of Feldgrau woollen cloth. As was the case with the black Feldjacke, the lining only covered part of the interior and it could be made of brownish grey cotton or synthetic silk. It was fastened by means of nine buttons, two of them on the right side and the rest on the left. (J.O. Rodríguez)





Radio operator of the 341 Sturmgeschütz-Brigade
Normandy, 1944 (A. Larios)



Unteroffizier of the 163rd Infantry Division. Norway, 1940. (E. Delgado)

GREATCOATS

At first, issue greatcoats had a dark Feldgrau collar. In September 1935 this colour was substituted with dark emerald green. In 1940 the colour was changed to Feldgrau and it remained that way since then. All greatcoats were made of woollen cloth, they had turned-up cuffs, two rows of six buttons, two pockets with straight flaps and an adjustable strap with two buttons on the back. The lining only came down to the waist and it was made of brownish grey cotton or grey or brownish grey synthetic silk.

1 to 3. Issue greatcoat with dark emerald green collar. Made between 1935 and 1940. (A.G.A. F-1273)

4 to 6. Issue greatcoat with Feldgrau collar. Since 1940. (A. Pinilla)



ISSUE TROUSERS (1936-43)

Trousers used by NCOs and privates were made of grey or Feldgrau - since 1940 - woollen cloth. They had two hip pockets, a back pocket and a smaller one on the front. They also had an adjustable strap on the back. The waist was lined with white cotton fabric.

1 to 3. Grey trousers with piping in the Arm-of-Service Colour. (Private collection)

4 and 5. Feldgrau woollen cloth trousers. (Fundación Don Rodrigo)





ISSUE TROUSERS (1943-44)

They have two hip pockets, one on the back and a smaller one with a flap on the front. They also have four belt straps, an adjustable strap on either side and a reinforced crotch. The cuffs are adjusted to the ankles by means of fabric straps. (C. Fernández)





ISSUE TROUSERS FOR PANZER TROOPS

They have two pockets on the back, two on either side and a smaller one on the front. All of these pockets, except for the latter, have flaps. The waist is adjusted with a belt and the cuffs are adjusted by means of fabric straps. They are lined with white cotton fabric.
(C. Plaza and A. Larios)





Unteroffizier of the Panzer Lehr Division. Normandy, 1944. (A. Larios e Intaria)



Officer of the 544 Grenadier-Regiment. Stalingrad, 1942-43. (A. Larios)

MARCHING BOOTS

The leg could be between 29 and 41 centimetres high. The sole had about 30 nails, depending on the size. Besides this, the front was reinforced with a metal toe cap, and the heel had a U-shaped piece of metal. The aim of all this was to prevent the sole from wearing out. (E. Delgado)



BERGSCHUHE

As for special footwear, mountain hunters used brown or black leather ankle boots - called Bergschuhe - which had a combination of metal plates and nails on their soles to improve their grip. These boots were used with Feldgrau bandages which were wrapped around the ankle. (A. Larios)



Officer of the 95th Gebirgs-Artillerie Regiment. (A. Larios)

RIDING BOOTS

Mounted personnel used boots which were similar to marching boots, but with a narrower, higher leg. Also, the heel had a crescent shaped leather piece for the spurs to rest on. These boots, which were called Reitstiefel, were also issued by the Army free of charge to privates and NCOs. However, many officers wore them with their Field and Service Uniforms.

(G. López)



III Field Equipment

Some troops used special equipment, so here we will only look at the equipment that Infantry units carried.

I. GENERAL CONSIDERATIONS

The purchase, storage and supply of equipment to the troops was carried out in the same way and depended from the same bodies as in the case of clothing.

The way in which equipment had to be carried, the elements that made it up or the variations allowed in each case were aspects regulated by the Army Service (*Heeresverdienstvorschriften*) and the Army Regulation Books (*Heeresverordnungsblättern*)¹. The regulations were very clear and the material issued was always as modern as possible and the most useful according to the role of each individual soldier. Nevertheless, the high costs afforded by the production of this material meant that cuts were necessary, so old equipment carried on being used, even if it was left for *Ersatzheer* units or units of foreigners. Likewise, the lifetime of articles had to be extended due to the war. Thus, repair workshops both in units and out of them played a very important role.

MATERIALS

The two most commonly used materials in the manufacture of equipment were cotton canvas and leather. The latter was not only used to make many articles, but also to reinforce other items mostly made of other materials. Thus, for example,

packs, which were mainly made of canvas, had leather straps and reinforcements all around the edges. Such was the case with other items such as the bread bag, the clothes bag (*Bekleidungssack 31*) or the ammunition pouches for *MP-38* and *MP-40*² sub-machine guns.

Some of the most commonly used metals were aluminium, steel and zinc, which were usually given a coat of paint. Rings, hooks, buckles and other small elements were painted ash grey, black or olive green. However, as buttons were made of materials that do not rust so much – aluminium or zinc – they were rarely painted.

Larger metal items were also protected with paint. For example, canteen pots were painted black, whereas marmites and gas mask cases were painted dark green. In 1941 olive green was adopted for pots and marmites, although the rest of the material carried on being painted dark green, a colour which was hard to get during the war, as green pigments were scarce.

Leather items were usually dyed black,



**Signals post on the Eastern Front.
(A.G.A. F- 1273)**



A grenadier of the Grossdeutschland Division inside a semi-tracked vehicle Sd. Kfz. 251. (A.P.)



Each machine gun team was made up of three men: the first shooter, helped by the second one, and the third one. The second shooter, like the man shown here, was in charge of carrying the boxes of ammunition and the case with the spare barrel for the machine gun as well as his own equipment.
(J. Escarré)



Mark showing the name of the manufacturer, the town and the year in which the article was manufactured. (L.M. Sánchez)



This marmite is marked with the initials of the manufacturer and the year when it was manufactured. The year could be shown in full or, as is the case here, by means of the last two digits. (G. Cano)



A canteen with the stamp of the Waffenamt. (L.M. Sánchez)

although brown was also used, especially for officers. In 1943 an order was issued by which all leather items had to be dyed black but, as had happened in other occasions, this order was not always complied with.

As for canvas items, at first they were greenish grey, although since 1941-42 olive green

shades became most common.

As was the case with clothing, the breakout of the war affected the manufacture of equipment, as there was a progressive deterioration in the quality of the materials employed. One of the clearest examples is leather, which was substituted towards the end of the war with a compound made of pressed cardboard. Another example is aluminium, which in some cases was substituted with Bakelite or iron.

MARKING

Leather and metal items were stamped, whereas canvas items were marked with indelible black or blue ink. In any case, this was not a fixed rule, as many leather or metal items were also marked with indelible ink³.

The most common details were the name of the manufacturer, the place where the article had been manufactured and the year – for example, *E. LUNESCHLOSS, SOLINGEN, 1939 –*. Sometimes only the initials of the manufacturer appeared, followed by the year in which the article had been manufactured. The year could appear in full – *JLN 1942* – or only the last two digits – *CFL 41 –*. Towards the end of 1942 the system adopted for cloth-



Infantry rifleman. He is carrying two ammunition pouches for his Kar.98k. (S. Guillén)

ing was introduced. All details were coded by means of numbers separated by slashes and preceded by the letters *RBNr*.

Items were also marked to identify the soldier and the unit. Thus, before the war, according to regulations, all equipment had to be marked with the name of the man and the unit stamp. The name was marked on a paper label. The unit stamp, which was in abbreviated form – for example, *1/A.R. 250* –, could be on this same label or on a similar one. Sometimes, rather than using labels, details were marked directly onto the equipment with indelible ink or white paint. At the beginning of World War II the use of the unit stamp was discontinued.

Finally, all equipment had to pass the quality tests of the Armament Control Office (*Waffenamt*). If the item passed the tests it was stamped with the German national emblem, the letters *WaA* – abbreviation for *Waffenamt* – and the number of the inspector that had carried out the tests, for example, *WaA 320*.

II. FIELD EQUIPMENT

A distinction must be made between troop commanders – officers, NCOs and squad or section leaders – riflemen and privates, who needed special equipment to carry out their duties.

EQUIPMENT FOR INFANTRY RIFLEMEN

It was made up of: belt, straps or braces, cartridge holders, field spade, bayonet, anti-gas equipment, bread bag, canteen, marmite, camouflage shelter quarter and a support for the assault pack and its bag.

Belt

The belt (*Koppel*) worn by privates and NCOs – which also had to be worn by officers with the Field Uniform since November 1939 – was a black leather strap 4.5 centimetres



Leutnant wearing the belt adopted for officers in 1934. (A. González)

wide. This strap had two rows of holes at one end to adjust the buckle adopted by the *Heer* in January 1936. Dark yellow canvas straps were also manufactured. They were originally intended for the *Afrika Korps*, but they were also used in Europe since 1942.

The buckle (*Koppelschloss*) was made of stamped aluminium and it was 6.4 centimetres long and 4.9 centimetres wide. It was painted *Feldgrau* and it had a grainy surface. The back had a metal fastener and a bolt with two spikes to adjust it to the belt-strap.

NCOs and privates also used this buckle with their Walking-out Dress and Parade Uniform; the only difference was the fact that it was not painted. Stamped steel buckles with a plain surface were also manufactured and, at the end of the war, they were made of brown Bakelite.

Braces

They were Y-shaped. The lower end had a metal hook which was adjusted to the back of the belt. The other two ends also had metal hooks which could be regulated and were hooked into the back rings of the cartridge holders, the ammunition pouches and the one on the back of the accessory box for *MG-42* and *MG-43* machine guns.

Initially, they were called "cartridge holder braces" or *Trageriemen für Patronentaschen*. However, since new braces for Infantry units were introduced in April 1939, other names were adopted. The previous model carried on being used by officers – from the rank of captain upwards – and the Cavalry troops. In the first case they became known as "officer braces" or *Kopeltraggestell für Offiziere*, whereas the second model was called "Cavalry braces" or *Kopeltraggestell für Kavallerie*.

On the next page, officer of the 276th Infantry Division wearing Field Uniform. He is carrying binoculars, ammunition pouches, map case and holster. The rest of the equipment is the same as a rifleman's. (C. Plaza)





Germany, 1935. Artillerymen wearing "cartridge holder braces", a piece of equipment which was only used by Cavalry units and some officers since April 1939. (A. González)

Braces with auxiliary straps

In April 1939 a new model of braces was adopted. It differed from the previous one in that it had two rings and auxiliary straps. At the beginning they were called "braces with auxiliary straps" or *Koppeltragggestell mit Hilfsträgerriemen*, but later, and as they were intended

for the Infantry⁴, they became known as "Infantry braces" or *Koppeltragggestell für Infanterie*.

These braces were made of black leather, although during the war a variant made of dark yellow canvas was also manufactured and used both in Africa and Europe.

The Zeltbahn was a triangle with a camouflage scheme of interrupted stripes and polygonal shapes on a sandy background. This background was darker on one of the sides of the triangle. (M. Álvaro)



Support for the assault pack

In April 1939 a frame was introduced for the soldier to carry his marmite, camouflage shelter quarter and bag with different utensils on his back. This set of items was called "assault pack" or *Sturmgepäck*.

This A-shaped frame was made of wood or aluminium strips covered with dark yellow canvas. It also had some metal hooks to hook onto the auxiliary rings of "Infantry braces".

The marmite was secured onto the frame by means of a removable horizontal strap made of leather or canvas. The camouflage shelter quarter was secured by means of two vertical straps made of the same materials, but which could not be removed as they were riveted and sewn onto the frame.

Assault pack bag

This canvas bag was called *Beutel zum Sturmgepäck*. The first ones were greenish grey, but since 1940 olive green shades became most common.

It was carried as part of the assault pack, either behind or under the camouflage shelter quarter. It was used to keep, amongst other things, the box with cleaning utensils for the rifle, strings to put up the tent, some underwear garments and iron rations.

Marmite

The marmite (*Kochgeschirr 31*) was made of aluminium and it had two parts: the pan or plate and the pot. The first part was used to warm up the food or as a plate. The pot, which had a capacity of 1.7 litres, had a wire handle and could also be used to warm up food or to eat from.

The outside was painted dark green, or olive green since April 1941. It was carried inside the bread bag or held onto the assault pack frame with a leather or canvas strap.



Rifleman of a Infantry Regiment. (J. Escarré)



The photograph in the previous page shows details of the assault pack frame and bag. (C. Fernández)

Bread bag

The bread bag model (*Brotbeutel 31*) used during World War II had been introduced in 1931, although it had been a regulation item in the German Army since the 19th Century.

It was a canvas bag that had one single compartment and a flap. This flap had two leather straps and two rings to secure the canteen and the marmite. The flap was closed by means of three leather straps inside the bag.

It was usually fastened to the belt, but it could also be slung around the shoulder by means of an auxiliary strap which was adjusted to two rings on the back of the bag.

At first these bags were

Radio operators wearing the 1930 mask. (A. González)

greenish grey, but since 1941 olive green became the most common colour. Towards the end of the war they were made in brown or cinnamon.

The bread bag was used to keep several objects: butter tin (*Fettdose*), field stove (*Esbit kocher*), cutlery, field cap, sewing utensils and any personal belongings such as tobacco, shaving utensils or mail.

At the end of the war some bags with an interior pocket were manufactured. This pocket was made to keep the cleaning utensils for the *Kar.98k* rifle.

Canteen

The canteen or *Feldflasche* was an aluminium flask with a screw-on top and a removable brown felt cover. It also had an aluminium pot – called *Trinkbekker* – which was painted black on the outside. In 1941 this colour was substituted with olive green.

The flask and the pot were held together by means of a leather or canvas strap. This strap had a metal hook that held the canteen onto the right ring of the bread bag flap.

During the war some flasks were made of steel, painted or not, and there were also enamelled versions. There were also canteens that had a black Bakelite cup instead of the pot.

NCO of a Panzergrenadiere regiment. In the foreground there is a gas mask in its metal case. (A.G.A. F-1363)



Camouflage shelter quarter

It was called *Zeltbahn*, it was triangular and it had two layers of cotton fabric. It was stamped with a camouflage design called *Splittermuster*, a design of interrupted stripes and brown and green shapes on a sandy background. This background was darker on one of the sides of the fabric⁵.

The base of the triangle was 240 centimetres long and the sides were 203 centimetres long. Along the base there were six equidistant buttonholes, each of which matched a button slightly above it. On each side of the triangle there were twelve buttonholes and twelve buttons, and on each corner there was a metal eyelet for the string to go through when setting up the tent.

There was an opening in the middle of the triangle which could be closed by means of two overlapping flaps and which served as a window or as a hole for the head, depending on whether the shelter quarter was used as a tent or as a poncho for the rain. These were not the only possible applications for the camouflage shelter quarter, as it could also be used to make floats, stretchers, etc.

It could be carried secured to the assault pack frame, held to the back of the belt by means of two straps, rolled around the marmite or rolled together with the coat and secured to the pack.

Cartridge holders

On the front, each rifleman had two cartridge holders (*Patronentaschen*) to carry the ammunition for the *Kar. 98k* rifle.

They were made of leather that had been dyed black. Each cartridge holder had three boxes held together by a slightly curved support made of the same material. Each box fitted

It had two leather straps on the back for the belt to go through and a metal D-shaped or rectangular ring where the cross strap was hooked on.

Usually, *Ersatzheer* soldiers and soldiers of units which were not on the front line were only given one cartridge holder.

Anti-gas material

Individual anti-gas equipment was made up of the following items: a gas mask in its metal case, a protective cape against persistent gases, four tubes of hypochlorite tablets and a flask with a special liquid to disinfect armament. Besides this, soldiers with eyesight problems were given some special glasses (*Masken-Brille*), as normal ones could be a hindrance when trying to put the mask on⁶.

A) The gas mask or *Gasmaske*

It afforded protection against gases that spread in the atmosphere and attacked the respiratory system. It was made up of a mask and a filter.

- 1930 Mask: it was made of vulcanised fabric. The outside was green and the inside was grey. It had two visors which were made of a metal ring painted green, an outer eyepiece and an inner eyepiece. The latter was made of a celluloid by-product and it was removable. The air held between the inner and outer eyepieces prevented them from steaming up in cold weather.

The inner edge of the mask was made of leather. On the inside, at chin height, there was a small strap



The second shooter in machine gun teams was armed with a rifle and a gun. In this case the ammunition boxes are secured to the harness which was originally used to carry the parts for the 50mm M1936 light mortar. (J. Escarré and J. León)

two cartridge clips for five 7.92mm cartridges each. Thus, each cartridge holder could carry up to sixty projectiles.

of the same material which was regulated by means of a button and which prevented the mask from hanging forwards and hindering vision.

The mask was adjusted to the head by means of green canvas straps reinforced with elastics and which could be regulated. It also had an auxiliary strap so that it could be hung around the neck.

On the lower part of the mask there was a metal mouthpiece with two valves. One of them opened when inhaling air from the filter, whereas the other one opened to let out the exhaled air. The mouthpiece had an opening on which the filter was screwed.

The mask was made in three sizes, as it had to fit perfectly; otherwise it did not work properly. To find out what the right size was the soldier stood with his back to a light and his mask on. His instructor would then look through the eyepieces to see whether any light was filtering into the mask. If the light got through that meant that there was a gap through which gases would also be able to get in, therefore, the size was not right.

- 1938 Mask: this model was more practical, resistant and easy to produce than the previous one and it was made of black or green synthetic rubber. The strap adjustment system also changed and the inside of the mask was simplified, so that the inner rim was no longer made of leather but of synthetic rubber.

- Filter: different models were used: *FE 37 – or Filter Einsatz M. 1937 –*, *FE 37R*, *FE 41* and *FE 42*. They all lasted for approximately four hours. After that time they became saturated and they had to be replaced. The inside was made of several filtering layers which could vary in thickness and composition depending on the



Ersatzheer soldiers were usually equipped with one single cartridge holder. (Intaria)



The use of garments for different arms-of-service was common. The photograph shows a general and an officer wearing Luftwaffe camouflage tunics. (S. Guillén)



NCO of the 94th Gebirgsjäger Regiment. Hungary, 1944. (Fundación Don Rodrigo)

model. In the case of the FE 37 there were three layers and they were made of the following materials: the first one was a special gauze that worked against gases that dissolved in the air, the second one was made of active carbon and it worked against all kind of gases, the last layer was made of a chemical gauze that would hold any noxious elements that might have got through the other two.

B) The gas mask case or *Tragbüchse für Gasmask*

The gas mask was kept in a metal case. Between 1930



Stielhandgranaten M1924 and the metal box to carry them in. (A.P.)



and the end of World War II, three different models were used.

- 1930 case: it was 26 centimetres high and 11.5 centimetres in diameter. Its top was higher than that of the other two models. The fastener was a metal clasp with a flap of the same material. By pulling the flap down the clasp pressed onto a hook on the front of the top which closed the case. Inside the lid there was a small box that could be opened sideways to keep an extra set of inner eyepieces.

- 1936 case: it was 25 centimetres high and 11.5 centimetres in diameter. The differences between this one and

the 1930 model were as follows. Firstly, the inside was reinforced with metal sheet and the box for spare eyepieces opened towards the front. Second, the fastener was improved by adding a canvas flap and a stronger clasp. Later on it was substituted by a more efficient fastening system which became the final one, as it was also used for the 1938 Case.

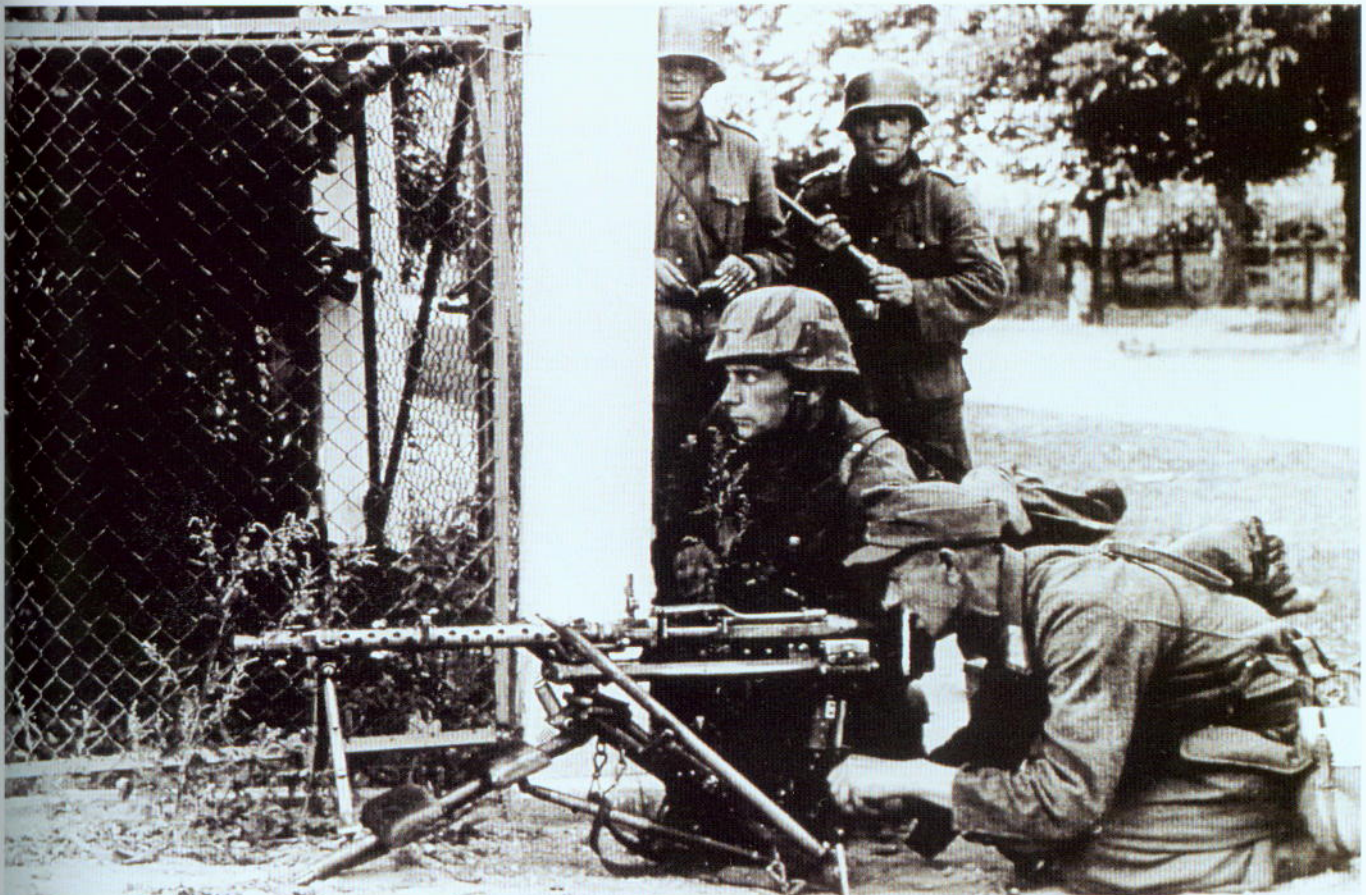
- 1938 case: it was adopted in 1938, it was 27.5 centimetres high and 11.5 centimetres in diameter. The 1936 model was not withdrawn immediately after its introduction because mass distribution only started in mid 1942. The longitudinal and bottom welding of cases manufactured from the end of 1941 onwards were reinforced. These cases were identified by the letter D, which was printed at the bottom.

All of these cases had three metal clasps. Two of these held onto the canvas strap used to carry the case. The other clasp held onto a smaller strap with a metal hook that secured the case to the back of the belt to stop it from banging when running or walking.



Above and centre, grenades, some boxes of ammunition, a field telephone and a magnetic mine. Below, MG-34 machine gun, positioned as a heavy weapon. (AGA F-1272 and A.P.)

The case could be carried in different ways. Infantrymen slung the canvas strap across their right shoulder, resting the case on their left hip.





First shooter of a machine gun team. As well as the usual equipment, he is carrying a Luger P-08 gun in its holster and a box of accessories and tools for the MG-34 machine gun. (J. León)

Cavalry units slung the strap across their left shoulder, so the case rested on the soldier's right hip. Drivers hung their case around their neck, so that it rested on their chest in a horizontal position, although motorcyclists and cyclists could also carry it like infantrymen. Finally, drivers of horse-drawn vehicles also hung their case around their neck, but in a vertical position.

C) Anti-gas cape or *Gasplane*

It was designed to protect the soldier from gases that attacked the skin. It was rectangular and it was 2 metres long by 1.5 metres wide. It was made of paper or fabric and impregnated in a solution that repelled the action of these gases. It was carried in a cover which at first was made of waterproof dark green fabric. However, since 1942-43 these covers were made of olive green or *Feldgrau* fabric.

At the beginning of the war, regulations specified that the cape had to be carried over the chest and held to the strap of the gas mask case by means of two fabric belt-straps it had on the back. Later, in March 1940, an order was issued by which the cape still had to be held to the same strap but instead of it hanging over the chest it had to hang together with the gas mask case. However, this order, like others, was not always complied with. Thus, most soldiers carried their cape around the case and held by means of some leather straps. This was more comfortable but it did not comply with regulations, as the pressure of the leather straps ended up damaging the cape.

Trench spade

This spade (*Spaten*) had a square steel blade and a wooden handle. The latter was varnished and the blade was painted black.

It was carried in a black leather case which was hung from the left side of the belt. The case had two leather belt-straps for the belt to go through.

Folding spade

This new version of the trench spade (*Klappspaten*) was introduced in 1938, although its use did not

position with respect to the handle.

The spade was carried in a black leather case, although during the war cases were also made of black or cinnamon artificial leather. This case had two belt-straps: one to put the belt through and the other one, on one side, for the bayonet.

The bayonet

The bayonet (*Seitengewehr*) S.84/98 for the *Kar.98k* rifle was carried in a black leather baldric which was secured to the left side of the belt. The bayonet sheath was fixed onto either of the two spade models described above.

EQUIPMENT FOR TROOP COMMANDERS AND MACHINE GUN GUNNERS

Almost all items described so far

could also be carried by troop commanders and machine gun gunners. However, there were items which could only be used by these men.

The officer belt

An order issued in November 1939 stated that officers had to wear the same belt as NCOs and privates with their Field Uniform. With the rest of the uniforms – except for the Parade Uniform and, in certain occasions, the Service and Society Uniforms – they had to carry on using the belt and cross strap introduced in 1934 (*Leibriemen mit Schulterriemen 34*).

This belt had a silver buckle – gilt for generals – of the open type, with two spikes. The strap was made of brown leather and it could be between 5 and 5.5 centimetres wide. The cross strap was of the same colour and



Medical personnel used special equipment. This man is wearing drill trousers and tunic. He is sitting in front of a tent made with four camouflage shelter quarters. In this case, the ammunition box for MG-34 and MG-42 machine guns is being used as a first-aid case. (A.P.)

become widespread until World War II had started.

The blade was pointed, it was made of steel and it was painted black. The handle was made of wood and it was longer than that of the other spade. When folded, this spade was as big as the trench spade: 50 centimetres long, but when it was unfolded it was 70 centimetres long. Another advantage was the fact that it could be used as a pickaxe by just adjusting the blade in a perpendicular

material, 2.5 centimetres wide, regulated by means of a buckle and it was worn over the right shoulder. In November 1939 this cross strap was eliminated from the collection of regulation items, so its use was discontinued.

officers, but they had to purchase them themselves. Officers of rear-guard units and *Ersatzheer* usually carried 7.65mm guns.

Holsters for these guns (*Pistolen-taschen*) were also very varied. They were made of black or brown leather.

transparent celluloid sheets held together by a leather frame.

Binoculars

Binoculars (*Dienstglas*) were given to officers, some NCOs and artillery observers.


Regulation binoculars were 6 x 30 and they were made by different manufacturers. The most common were black, although, since 1943, there were some that were painted dark yellow.

They were kept in a black or brown case, which could be made of leather or Bakelite. This case had two belt-straps on the back – to secure it to the belt – and a removable strap to sling it over the shoulder.

Ammunition pouches for MP-38 and MP-40 sub-machine guns

These weapons were issued to squad and section leaders and to officers and NCOs in charge of riflemen companies or reconnaissance units. Magazines were carried in two olive green or dark yellow canvas pouches (*Maschinenpistole-Magazinentaschen*). Each pouch had three pockets that were closed by means of leather straps. Each pocket could fit a magazine with 32 projectiles. On the back of each pouch there were two leather belt-straps for the belt to go through and a ring that held onto the cross strap hook. The case, which was carried on the right side of the belt, also had a pocket for the utensil used to load the gun.

Accessory box for MG-34 and MG-42 machine guns

Men shooting these weapons were usually corporals or first class privates. They were equipped with black leather boxes (*Ersatztückestaschen*), which were carried on the right side of the belt and which contained the following accessories for machine guns: an asbestos glove, a flask of oil, an anti-air sight, a multiple spanner, tape and several cleaning cloths. 



Eastern Front, 1941. A motorised liaison officer talks to a Panzer I Ausf. B commander. The motorcyclist is carrying his mask case hanging from his neck and in a vertical position. (A.G.A. F-1273)

In July 1943 an order was issued by which all belts had to be dyed black. This order included all belts manufactured from that date on. Also, straps became 4.5 centimetres wide, that is, the same width as belts for NCOs and privates.

Holsters

The *Wehrmacht* used a wide variety of guns which included numerous captured weapons. The most common were the *Luger P08* and the 9mm *Walter P38*. Amongst 7.65mm guns, the most important were the *Mauser HSc*, *Walter PPK*, *Walter PP* and *Sauer M38 (H)*.

9mm guns were issued by the Army to some NCOs, tank crews and machine gun and mortar gunners. They were also used by *Feldheer*

They had a pocket for the spare cartridge and some of them had a small case inside for the utensil used to uncock and load the weapon.

Map case

This case (*Meldekartentasche 35*) was used by officers, some NCOs, artillery observers, the Military Police and by some soldiers that needed it to fulfil their duties.

The most common model was a rectangular black or brown wallet made of grainy leather. The top was closed by means of a strap and buckle. It had pockets for rulers and pencils and two adjustable belt-straps for the belt to go through. The inside was divided into two compartments. One of them was used to keep a map cover. This cover was made of two

BELT

The belt used by privates and NCOs with the Field Uniform was a strap with a flap that had two rows of holes. This flap was used to regulate and adjust the buckle.

1 to 4. Details of the way the buckle was adjusted to the belt strap. (G. Cano)

5. Officers used the same belt with their Field Uniform as NCOs and privates. (C. Plaza)

1



2



3



4



INFANTRY BRACES

They were Y-shaped. The lower end had a metal hook which was adjusted to the back of the belt. The other two ends also had metal hooks which could be regulated and were hooked to the rings on cartridge holders, ammunition pouches or the one on the back of the accessory box for the MG-42 and MG-43 machine guns.

1. Infantry braces made of dark yellow canvas. (Arganzuela)

2 to 4 Infantry braces. (C. Fernández and A.G.A. F-1363)





First shooter of a machine gun team of the 235th Infantry Regiment. (A. Pinilla and G. Cano)

BREAD BAG AND MARMITE

The marmite was made up of a pan or plate and a pot. The first part was used to warm up the food or as a plate. The outside was painted dark green, or olive green since April 1941. It was carried secured to the bread bag or held onto the assault pack frame.

There were two leather belt straps on the top of the bread bag flap to secure the canteen and the marmite. This bag was carried hanging from the belt, although it could also be slung around the shoulder. To this effect, it had an auxiliary strap which could be adjusted by means of two rings it had on the back. (G. Cano)





CANTEEN

The canteen was made up of an aluminium flask with a brown felt cover and an aluminium pot. The flask and the pot were held together by means of a strap with a metal hook. This hook was used to secure the canteen to the ring on the right of the bread bag flap. During the war some canteens were manufactured with a Bakelite cup instead of a pot. (A. Larios)





CARTRIDGE HOLDERS

Cartridge holders to carry ammunition for the Kar.98k rifle were made of black leather. Each cartridge holder had three boxes held together by means of a slightly curved support made of the same material. On the back it had two leather belt-straps for the belt to go through, and a metal ring for the cross strap to be hooked into. (J. Escarré)





AMMUNITION POUCHES

Magazines for MP-38 and MP-40

sub-machine.guns.were.carried.in.two.olive
green.or.dark.yellow.canvas.pouches.Each
pouch.had.three.pockets.that.were.closed.by
means.of.leather.straps.Each.pocket.could
fit.a.magazine.with.32.projectiles.
(A.Larios, G. Cano y AGA F-1272)





1



2



3



4



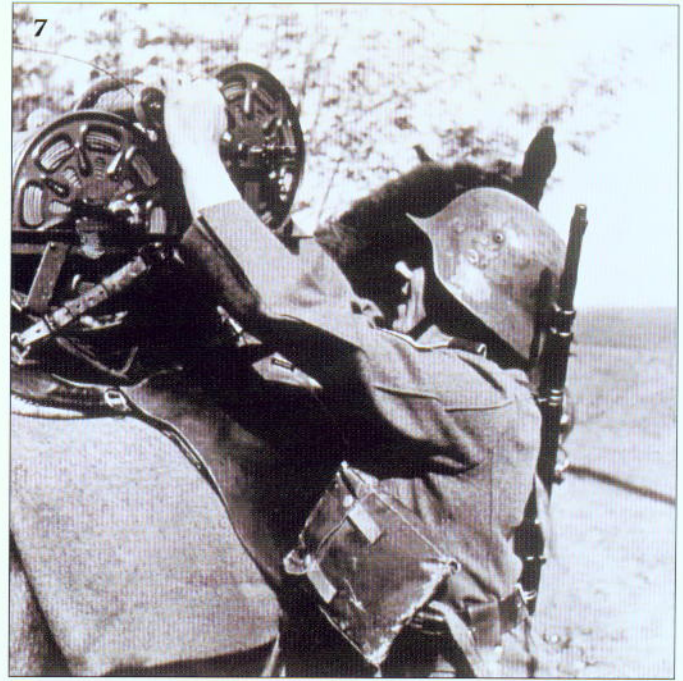
5



ANTI-GAS MATERIAL

Individual anti-gas equipment was made up of, amongst other things, a gas mask in its metal case and a protective cape against persistent gases. Besides this, soldiers with eyesight problems were given some special glasses.

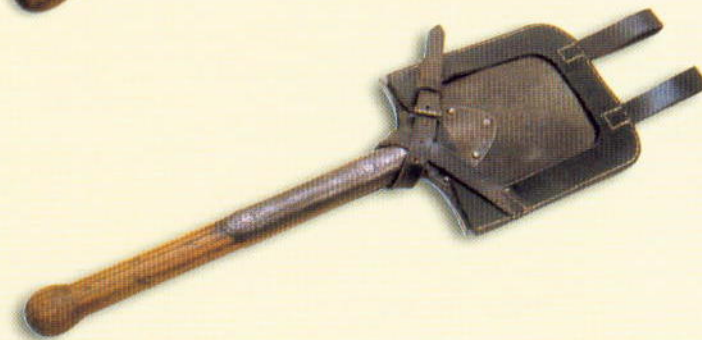
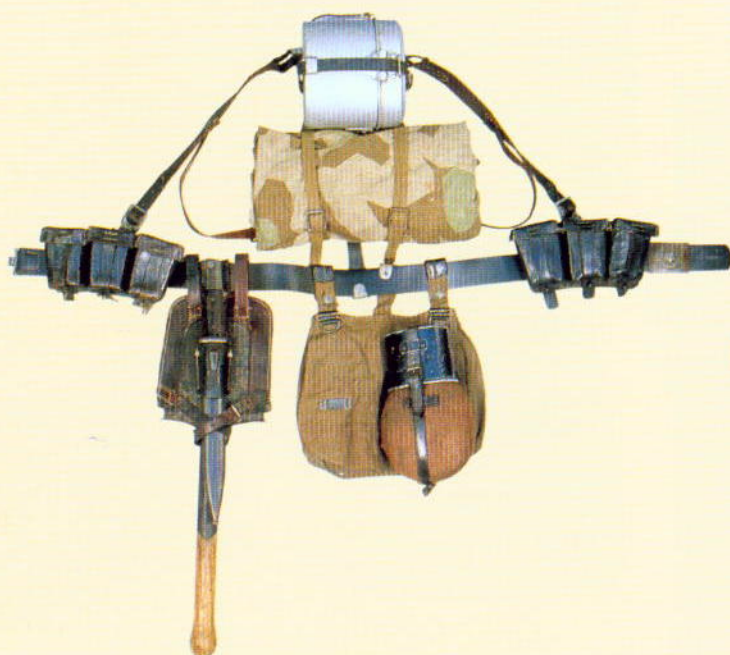
1. 1930 mask. (Arganzuela)
2. Glasses for soldiers with eyesight problems. (J. Escarré)
- 3 to 5. From left to right: 1930, 1936 and 1938 cases. (Arganzuela)
6. All cases had two straps: one was slung over the shoulder and the other was secured to the belt. (A. Ferrer-Dalmau)
- 7 to 9. Anti-gas cape in its cover. (M. Alvaro and A.G.A. F-1363)

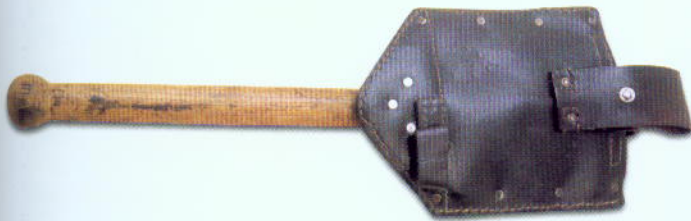
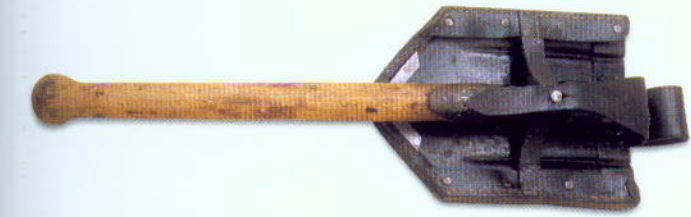


SPADES

The trench spade had a square steel blade and a wooden handle. It was carried in a black leather case which was held onto the left side of the belt.

The folding spade, as opposed to the trench spade, could also be used as a pickaxe by just adjusting the blade in a perpendicular position with respect to the handle. It was carried in a black leather case, although during the war cases were also made of black or cinnamon artificial leather. (J. Escarré)

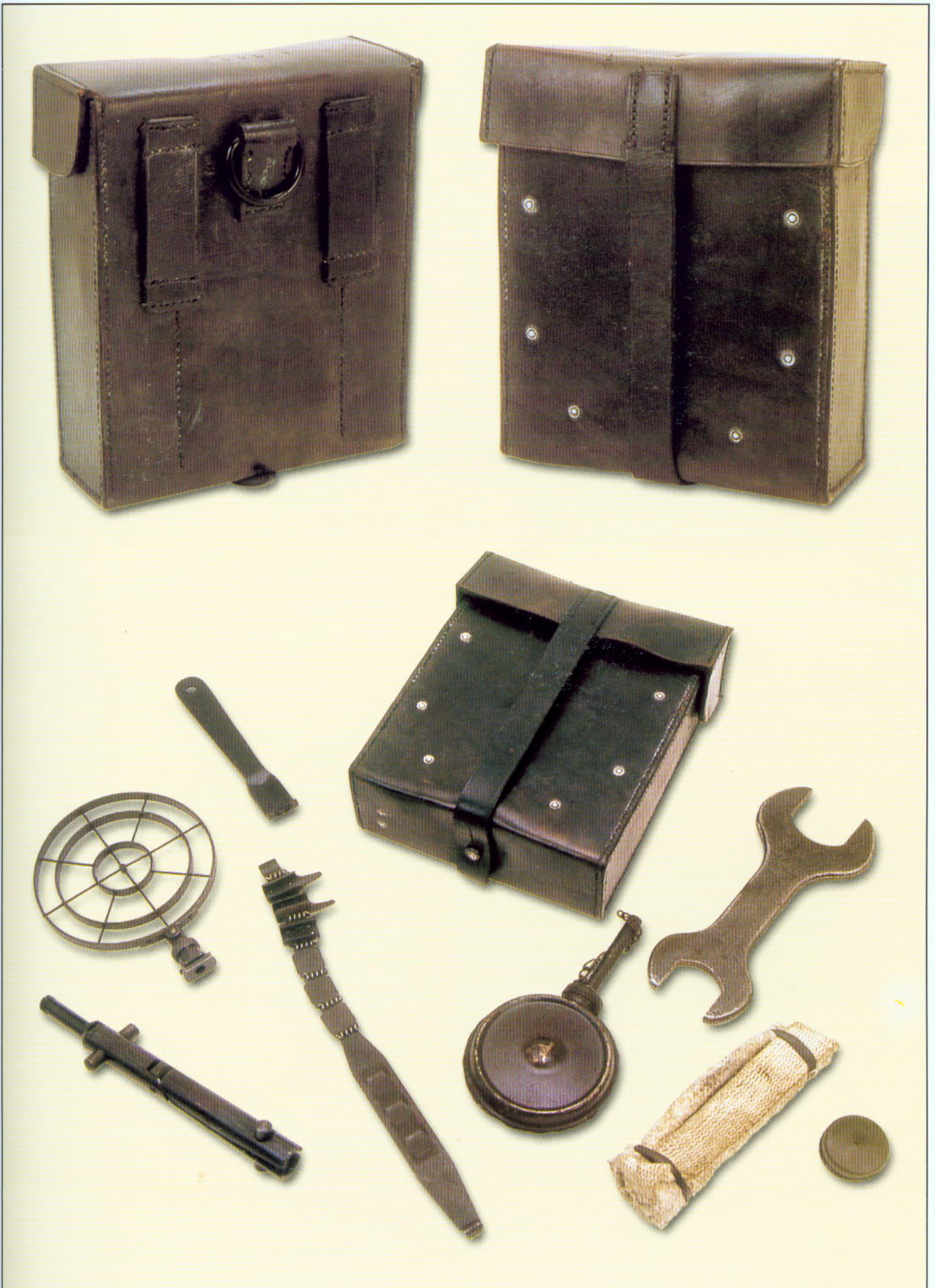




MG-34 MACHINE GUN

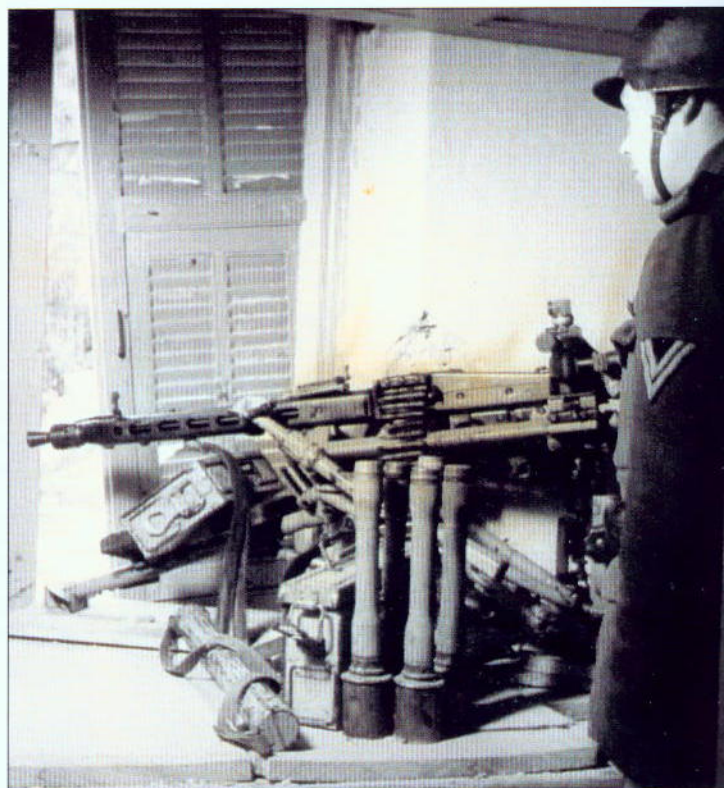
Men firing this weapon were usually corporals or first class privates. They were equipped with black leather boxes to carry accessories and tools for machine guns. (G.Cano y AGA F-1272)





MG-42 MACHINE GUN

The MG-34 was manufactured throughout the whole war, despite the fact that German engineers designed a machine gun which was cheaper and faster to manufacture: the MG-42. (Fundación Don Rodrigo AGA F-1272)





HOLSTERS

The Wehrmacht used a wide variety of guns, which included numerous captured weapons. The most common were the Luger P08 (3) and the 9mm Walter P38 (2). Amongst 7.65mm guns, the most important were the Mauser HSc, Walter PPK, Walter PP (1) and Sauer M38 (H).

Holsters for these guns were also very varied. They were made of black or brown leather. They had a pocket for the spare cartridge and some of them had a small case inside for the utensil used to uncock and load the weapon.

(C. Plaza and L.M. Sánchez)





3

MAP CASE

The most common model was a rectangular black or brown wallet. It had pockets for rulers and pencils and two adjustable belt-straps for the belt to go through. The inside was divided into two compartments. One of them was used to keep a map cover. (C. Plaza)





Officer of an Infantry regiment wearing a Field Uniform. (C. Plaza)

• N O T E S •

INTRODUCTION

1. ANGOLIA, John R. and SCHLINCH, Adolf. *Uniforms & Traditions of the German Army (1933-1945)* (3 Vol.), R. James Bender Publishing, San José (California).
2. LEFÈVRE, Eric, *La Wehrmacht: Uniformes et Insignies de l'Armee de Terre Allemande (Heer)*, Paris, Jaques Grancher Editeur, 1986.
3. L. DAVIS, Brian, *Uniforms and Insignia of the Luftwaffe* (2 Vol.), Arms and Armour, London. There are two editions, a paperback and a hardback.
4. BUENO CARRERA, José María, *Uniformes del III Reich*, San Martín, Madrid, 1977.
5. MARTON, P. VEDELAGO, G, *Los uniformes alemanes de la Segunda Guerra Mundial*, De Vecchi, Barcelona, 1981.
6. RECIO CARDONA, Ricardo and GONZÁLEZ SÁNCHEZ, Antonio, *Das Heer: Uniformes y Distintivos*, Agualarga, Madrid, 1996.
7. RECIO CARDONA, Ricardo. *El Servicio de Intendencia de la División Azul: La vida cotidiana de los expedicionarios (1941-1943)*, Fundación Don Rodrigo, Madrid, 1998.
8. GUILLÉN GONZÁLEZ, Santiago and CABALLERO JURADO, Carlos, *Escuadrillas Azules en Rusia: Historia y Uniformes*, Almena, Madrid, 1999.
9. This is the only magazine of uniformology published in Spanish. Published by Acción Press.

CHAPTER I

1. RECIO CARDONA, Ricardo and GONZÁLEZ SÁNCHEZ, Antonio, op. cit., pp. 67 to 88.
2. The woollen cloth on which the emblems, insignia and badges were embroidered or woven was called "badge cloth" or Abzeichendrap. This material was also used to make collars and the dark *Feldgrau* and dark emerald green shoulder straps.
3. However, the emblems worn on tunics by generals and marshals were always golden.
4. This term is used to refer to emblems, insignia and badges which were machine woven directly onto the fabric. *BeVo* was the abbreviation for *Bandfabrik Ewald Vorsteher*, the main insignia manufacturer in Germany.
5. Until then the cocarde was woven or embroidered separately on a dark *Feldgrau* cloth – until June 1937 – or dark emerald green.
6. As was the case with officers, until then the cocarde was woven separately on an ash grey base cloth – until June 1937 –, dark emerald green – until June 1940 – or *Feldgrau*.
7. The emblems for marshals and generals were embroidered with metal thread. *Celeon* was also used since July 1938.
8. RECIO CARDONA, Ricardo, *El Servicio de...* op. cit., pp.131 to 136.
9. The different Arms-of-Service of the German Army were identified by means of colours. These colours were worn on the piping on peaked caps, caps, shoulder straps, collar patches and trousers.
10. Between 1921 and 1936 this insignia identified senior privates.
11. Between 1921 and 1936 this insignia identified lance corporals, whereas the rank of corporal was identified by means of a V made of triple chevron.
12. GONZÁLEZ SÁNCHEZ, Antonio, "Los mariscales de campo del Ejército de Tierra alemán", in *Euro Uniformes* Nº 3 (February-March 2001), Madrid, Acción Press, pp. 36 to 39.
13. GONZÁLEZ SÁNCHEZ, Antonio, "Distintivos de Tradición", in *Armas y Municiones* Nº 117 (January 1996), Madrid, Multipress, pp. 80 to 83.
14. Except for radio operators and motorboat pilots. In the first case, the insignia was a thunderbolt embroidered in cotton thread onto an oval, the colour of the thread depended on the Arm-of-Service. In the second case, the insignia was a metal helm and anchor – which were later embroidered with aluminium thread – on an oval cloth base.
15. Except for treasurers.
16. GONZÁLEZ SÁNCHEZ, Antonio, "Pasadores de condecoraciones", in *Armas y Municiones* Nº 131 (March 1997), Madrid, Larpress, pp. 85 and 88; GONZÁLEZ SÁNCHEZ, Antonio, "Pasadores de condecoraciones (II)" in *Armas y Municiones* Nº 140 (December 1997), Madrid, Larpress, p. 88 to 90.

CHAPTER II

1. RECIO CARDONA, Ricardo, *El Servicio de...* op. cit., pp. 128 to 130.

2. The *Feldheer* was organised into Army Groups, Armies, Army Corps and Divisions. Three or four Divisions made up an Army Corps. In turn, several Army Corps made up an Army which, together with other Corps made up an Army Group (*Heeresgruppe*).

3. All officers were entitled to affiliate to the *Heeres-Kleiderkasse* in Berlin. It was like a discount store where they could also purchase regulation clothing and equipment. The quality of this material was very similar to that of many tailor shops, but it had the advantage of being cheaper. Before the war, the *Heeres-Kleiderkasse* did not have any branches outside Berlin, so officers destined in other towns had to do their shopping through the post. Since 1939 branches were opened both in and outside Germany. Garments purchased from this store do not have marks, except for peaked caps, manufactured by the Clothing Office with the mark *EREL*.

4. Although this piece of headgear was not used until January 1941.

5. RECIO CARDONA, Ricardo and GONZÁLEZ SÁNCHEZ, Antonio, op. cit., pp. 31 to 51.

6. LEFEVRE, Eric, op. cit., p. 108; LEFEVRE, Eric, and LAGARDE, Jean, "Les tenues d'officier de l'Armée de Terre allemande, 1933-45: Les temps de paix, 1933-39", in *Militaria Magazine* N° 16 (January 1987), Paris, Histoire & Collections, pp. 44 to 51.

7. For marshals and generals this piping was always red.



CHAPTER III

1. ROTTMAN, Gordon and VOLSTAD, Ron, *German combat equipment 1939-1945*, London, Osprey Publishing, 1991, p. 10 and 11.

2. RECIO CARDONA, Ricardo, "El equipo de campaña del soldado alemán (1939-1945)" (I), in *Armas* N° 165 (February 1996), Madrid, Hobby Press, pp 80-83.

3. RECIO CARDONA, Ricardo, "El equipo de campaña del soldado alemán (1939-1945)" (II), in *Armas* N° 166 (March 1996), Madrid, Hobby Press, pp. 14 to 18.

4. They were used by riflemen, NCOs and Lieutenants.

5. RECIO CARDONA, Ricardo, "El equipo de campaña del soldado alemán (1939-1945)" (IV), in *Armas* N° 178 (March 1997), Madrid, Hobby Press, pp. 78 to 82.

6. RECIO CARDONA, Ricardo, "El equipo de campaña del soldado alemán (1939-1945)" (III), in *Armas* N° 172 (September 1996), Madrid, Hobby Press, pp. 82 to 86.

• BIBLIOGRAPHY •

- ANGOLIA, John R. and SCHLINCH, Adolf. *Uniforms & Traditions of the German Army (1933-1945)* (3 Vol.), San José (California), R. James Bender Publishing.
- BORG, Jean-Phillipe, "L'équipement du soldat allemand de la deuxième guerre mondiale: les masques à gaz modèle 1930 et 1938", in *Militaria* N° 200 (March 2002), pp. 55-62.
- BORG, Jean-Phillipe, "L'équipement du soldat allemand de la deuxième guerre mondiale: les masques à gaz modèle 1930 et 1938" (2nd part), in *Militaria* N° 202 (May 2002), pp. 31-36.
- BRUCE, Robert, *German Automatic Weapons of World War II*, London, Windrow & Greene, 1996.
- BUENO, José María, *Uniformes del III Reich*, Madrid, San Martín, 1977.
- CATELLA, Francis, *Gott Mit Uns. Les boucles de ceinture allemandes (1870-1945)*, Strasbourg, RZM Publications, 1991.
- DAVIS, Brian L., *German Army Uniforms and Insignia (1933-1945)*, London, Brockhampton Press, 1998.
- DAVIS, Brian L., and MCGREGOR, Malcolm, *Badges & Insignia of the Third Reich (1933-1945)*, UK, Blandford Press, 1983.
- ENGELMAN, J., *Das Buch der Artillerie (1939-1945)*, Hanau, Podzun-Pallas-Verlag, 1983.
- FOWLER, E.W.W., *Nazi Regalia*, London, Warfare, 1992.
- HALCOMB, Jill and SARIS, P.B.R., Wilhelm, *Headgear of Hitler's Germany* (Vol I), San José (California), 1989.
- HAUT, W., *Das Buch der Infanterie*, Hanau, Podzun-Pallas-Verlag, 1982.
- HETTLER, Eberhardt, *Uniformen der Deutschen Wehrmacht. Heer, Kriegsmarine, Luftwaffe*, Hamburg, Militär-Archiv, 1979.
- HORMANN, Jörg, *Uniformen der Infanterie. 1919 bis heute*, Hanau, Podzun-Pallas-Verlag, 1989.
- HORMANN, Jörg, *Uniformen der Panzertruppe. 1919 bis heute*, Hanau, Podzun-Pallas-Verlag, 1989.
- KEMP, Anthony, *German Commanders of World War II*, Men-At-Arms Series, N° 124, London, Osprey, 1982.
- KOMIYA, Yasushi and KOMIYA, Akira, *Uniforms & Individual Equipment of the Third Reich*, Japan, Wild Mook.
- KRAWCZYK, Wade, *German Army Uniforms of World War II*, London, Widow & Greene, 1995.
- KUROWSKI, Franz, *Sturmgeschütz vor Assault Guns to the Front*, Canada, J.J. Federowicz Publishing, 1999.
- LAGARDE, Jean de, *German Soldiers of World War Two*, Paris, Histoire et Collections, 1994.
- LEFÈVRE, Eric, *La Wehrmacht, Uniformes et insignies de l'Armée de Terre Allemande (Heer)*, Paris, Jaques Grancher Editeur, 1986.
- MARTON, P. and VEDELAGO, G., *Los uniformes alemanes de la Segunda Guerra Mundial*, Editorial De Vecchi, Barcelona, 1981.
- MIROUZE, Laurent, *Soldats de la Seconde Guerre Mondiale*, Colección Europa Militar, N° 2, Paris, Histoire et Collections, 1990.
- MOLLO, Andrew and MCGREGOR, Malcolm, *Army Uniforms of World War II* (2 vol.), London, Blandford Press, 1973.
- MOLLO, Andrew, *The Armed Forces of World War Two*, London, Military Press, 1987.
- PETERSON, Daniel, *Wehrmacht Camouflage Uniforms & Post War Derivatives*, Europa Militar, 17, London, Windrow & Greene, 1995.
- QUARRIE, Bruce, *German Mountain Troops*, Cambridge, Patrick Stephens, 1980.
- RECIO CARDONA, Ricardo and GONZÁLEZ SÁNCHEZ, Antonio, *Das Heer. Uniformes y distintivos*, Madrid, Aldaba, 1996.
- RECIO CARDONA, Ricardo and GONZÁLEZ SÁNCHEZ, Antonio, *Das Heer, Uniformes y distintivos*, Madrid, Edimat, 2000.
- RECIO CARDONA, Ricardo, *El Servicio de Intendencia de la División Azul. La vida cotidiana de los expedicionarios (1941-1943)*, Madrid, Fundación Don Rodrigo, 1998.
- ROTTMAN, Gordon and VOLSTAD, Ron, *Equipos de combate alemanes*, Barcelona, RBA, 2000.
- THOMAS, Nigel and ANDREW, Stephen, *El Ejército alemán*, Barcelona, RBA, 1999.
- THOMAS, Nigel and ANDREW, Stephen, *El Ejército alemán* (Vol. II), Barcelona, RBA, 1999.
- THOMAS, Nigel and ANDREW, Stephen, *El Ejército alemán* (Vol. III), Barcelona, RBA, 1999.
- WILLIAMSON, Gordon and ANDREW, Stephen, *German Mountain & Ski Troops (1939-1945)*, Elite Series Collection, N° 63, London, Osprey, 1996.
- WINDROW, Martin and HOOK, Richard, *División Panzer*, Barcelona, RBA, 1999.

DOCUMENTARY SOURCES

Documentation on the Fourth Staff Section of the Spanish Voluntary Division. *Servicio Histórico Militar* (Ávila).

Documentation on the Fourth Staff Section of the Spanish Voluntary Division. *Archive of Fundación División Azul* (Madrid).

Hand Book of German Military Forces (TM-E-451), Washington, War Department of the USA, March 1945. Documentation published by Louisiana State University Press, 1990.

