Universal Multiple-Octet Coded Character Set
International Organization for Standardization
Organisation internationale de normalisation
Международная организация по стандартизации

Doc Type: **Working Group Document**
Title: **Proposal to add heraldic hatching characters to the UCS**
Source: **Michael Everson**
Status: **Individual Contribution**
Action: **For consideration by JTC1/SC2/WG2 and UTC**
Date: **2011-04-01**

0. Introduction. Seven squares with hatching patterns were encoded long ago in the UCS in the Geometric Shapes block at U+25A2 and U+25A4..25A9. The UCS character names list does not give any information as to their original intended purpose, but an examination of them shows that they are part of a set of hatchings which can be used to indicate different colours in heraldry and similar applications. Ultimately this series of hatchings derives from a number of sources, the chief of which was devised by Silvester Petra Sancta (1590–1647). Of the use of Petra Sancta hatching in heraldry, Stephen Friar writes:

> **Petra Sancta** A seventeenth-century Jesuit writer on armory, who devised a system of hatching to represent the armorial tinctures. Hatching is generally reserved for uncoloured illustrations where an indication of the tinctures is considered essential and 'tricking' inappropriate (see TRICK). A knowledge of hatching is essential in the identification of armorial silverware, bookplates and carvings in wood and stone, where this method has frequently been employed. The tinctures were entirely ignored in all matters of handicraft until the seventeenth century, and it is doubtful if hatching has ever been used in official armorial records. There is general agreement with regard to the method of depicting the common tinctures, but not to the treatment of the so-called stains, and they are shown overleaf in a manner which conforms to the majority (though certainly not all) of the heraldic reference books.

In order to complete this set of hatching patterns, 18 characters are proposed here for addition to the UCS. Also proposed is a set of annotations to the seven existing characters.

25A1   WHITE SQUARE
         • used in heraldic hatching for argent or silver or white

25A4   SQUARE WITH HORIZONTAL FILL
         • used in heraldic hatching for azure or blue

25A5   SQUARE WITH VERTICAL FILL
         • used in heraldic hatching for gules or red

25A6   SQUARE WITH ORTHOGONAL CROSSHATCH FILL
         • used in heraldic hatching for sable or black

25A7   SQUARE WITH UPPER LEFT TO LOWER RIGHT FILL
         • used in heraldic hatching for vert or green

25A8   SQUARE WITH UPPER RIGHT TO LOWER LEFT FILL
         • used in heraldic hatching for purpure or purple

▦ 25A9   SQUARE WITH DIAGONAL CROSSHATCH FILL
       • used in English heraldic hatching for murrey or reddish purple
       • used in German heraldic hatching for iron grey

▦ 2B60   SQUARE WITH DOTTED FILL
       • used in English heraldic hatching for Or or gold or yellow

▦ 2B61   SQUARE WITH HORIZONTAL AND UPPER LEFT TO LOWER RIGHT FILL
       • used in English heraldic hatching for sanguine or dark red

▦ 2B62   SQUARE WITH HORIZONTAL AND UPPER RIGHT TO LOWER LEFT FILL
       • used in English heraldic hatching for tenne or orange-tawny

▦ 2B63   SQUARE WITH VERTICAL AND UPPER LEFT TO LOWER RIGHT FILL
       • used in English and German heraldic hatching for marron or brown

▦ 2B64   SQUARE WITH VERTICAL AND UPPER RIGHT TO LOWER LEFT FILL
       • used in English heraldic hatching for fey or grey
       • used in German heraldic hatching for blood red

▦ 2B65   SQUARE WITH ORTHOGONAL CROSSHATCH AND UPPER LEFT TO LOWER RIGHT FILL
       • used in German heraldic hatching for earth colour

▦ 2B66   SQUARE WITH OFFSET HORIZONTAL LINE FILL
       • used in German heraldic hatching for water colour

▦ 2B67   SQUARE WITH OFFSET VERTICAL LINE FILL
       • used in German heraldic hatching for flesh colour

▦ 2B68   SQUARE WITH ALTERNATING VERTICAL AND HORIZONTAL FILL
       • used in English annd German heraldic hatching for cendree or ashen grey

▦ 2B69   SQUARE WITH HORIZONTAL LINE AND DOT FILL
       • used in some Spanish heraldic hatching for green

▦ 2B6A   SQUARE WITH VERTICAL LINE AND DOT FILL
       • used in some English heraldic hatching for orange

▦ 2B6B   SQUARE WITH ALTERNATING HORIZONTAL LINE AND DOT FILL
       • used in some Spanish heraldic hatching for green

▦ 2B6C   SQUARE WITH UPPER LEFT TO LOWER RIGHT STEPPED FILL
       • used in German heraldic hatching for "colour of nature" or proper colour

▦ 2B6D   SQUARE WITH UPPER RIGHT TO LOWER LEFT STEPPED FILL
       • used in Czech heraldic hatching for "colour of nature" or proper colour

▦ 2B6E   SQUARE WITH CROSS FILL
       • used in Italian heraldic hatching for steel

▦ 2B6F   SQUARE WITH X FILL
       • used in Italian heraldic hatching for sanguine or dark red

▦ 2B70   SQUARE WITH SEMI-CIRCLE FILL
       • used in Italian heraldic hatching for "colour of nature" or proper colour

▦ 2B71   SQUARE WITH ALTERNATING VERTICAL LINE AND DOT FILL
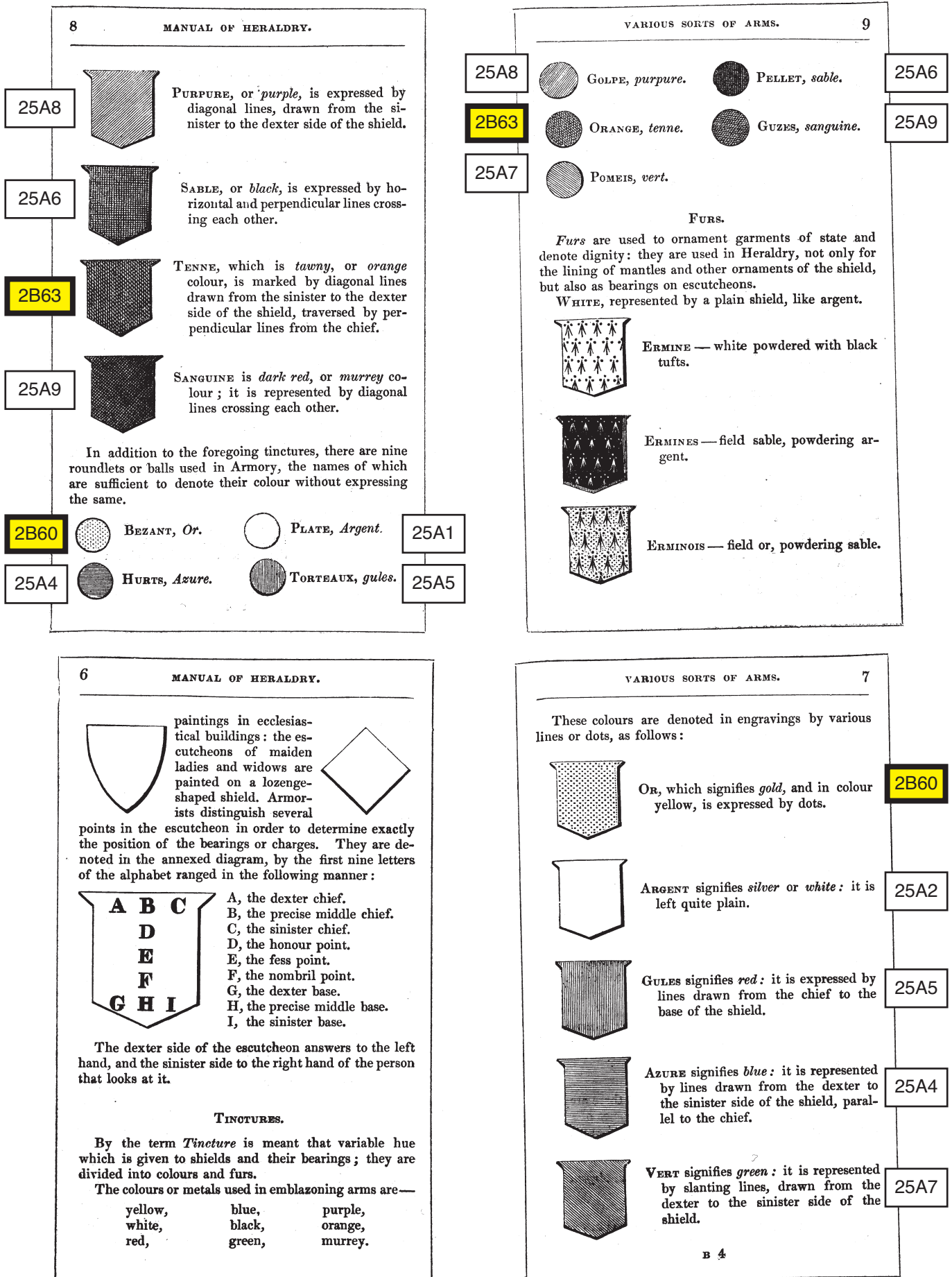   • used in some English heraldic hatching for tenne or orange-tawny

7. Unicode Character Properties. Character properties are proposed here.

```
2B60;SQUARE WITH DOTTED FILL;So;0;ON;;;;;N;;;;;
2B61;SQUARE WITH HORIZONTAL AND UPPER LEFT TO LOWER RIGHT FILL;So;0;ON;;;;;N;;;;;
2B62;SQUARE WITH HORIZONTAL AND UPPER RIGHT TO LOWER LEFT FILL;So;0;ON;;;;;N;;;;;
2B63;SQUARE WITH VERTICAL AND UPPER LEFT TO LOWER RIGHT FILL;So;0;ON;;;;;N;;;;;
2B64;SQUARE WITH VERTICAL AND UPPER RIGHT TO LOWER LEFT FILL;So;0;ON;;;;;N;;;;;
2B65;SQUARE WITH ORTHOGONAL CROSSHATCH AND UPPER LEFT TO LOWER RIGHT FILL;So;0;ON;;;;;N;;;;;
2B66;SQUARE WITH OFFSET HORIZONTAL LINE FILL;So;0;ON;;;;;N;;;;;
2B67;SQUARE WITH OFFSET VERTICAL LINE FILL;So;0;ON;;;;;N;;;;;
2B68;SQUARE WITH ALTERNATING VERTICAL AND HORIZONTAL FILL;So;0;ON;;;;;N;;;;;
2B69;SQUARE WITH HORIZONTAL LINE AND DOT FILL;So;0;ON;;;;;N;;;;;
2B6A;SQUARE WITH VERTICAL LINE AND DOT FILL;So;0;ON;;;;;N;;;;;
2B6B;SQUARE WITH ALTERNATING HORIZONTAL LINE AND DOT FILL;So;0;ON;;;;;N;;;;;
2B6C;SQUARE WITH UPPER LEFT TO LOWER RIGHT STEPPED FILL;So;0;ON;;;;;N;;;;;
2B6D;SQUARE WITH UPPER RIGHT TO LOWER LEFT STEPPED FILL;So;0;ON;;;;;N;;;;;
2B6E;SQUARE WITH CROSS FILL;So;0;ON;;;;;N;;;;;
2B6F;SQUARE WITH X FILL;So;0;ON;;;;;N;;;;;
2B70;SQUARE WITH SEMI-CIRCLE FILL;So;0;ON;;;;;N;;;;;
2B71;SQUARE WITH ALTERNATING VERTICAL LINE AND DOT FILL;So;0;ON;;;;;N;;;;;
```

8. Bibliography.

Bárczay Oszkár. 1897. *A heraldika kézikönyve müszótárral*. Budapest.

Brooke-Little, J. P. 1978. *Boutell's Heraldry*. Revised by J. P. Brooke-Little, M.V.O., M.A., F.S.A., F.H.S, Richmond Herald of Arms. London and New York: Frederick Warne. ISBN 0-7232-2096-4

Brooke-Little, J. P. 1985. *An Heraldic Alphabet*. By J. P. Brooke-Little, C.V.O., M.A., F.S.A., F.H.S, Norry and Ulster King of Arms. London: Robson Books. ISBN 0-86051-338-6

Fox-Davies, A. C. 1985. *A Complete Guide to Heraldry*. Revised and annotated by J. P. Brooke-Little, Norroy and Ulster King of Arms. Edinburgh: John Grant. ISBN 0-906223-78-4

Friar, Stephen. 1987. *A Dictionary of Heraldry*. New York: Harmony Books. ISBN 1-517-56665-6

Friar, Stephen, and John Ferguson. 1993. *Basic Heraldry*. Godalming: Bramley Books. ISBN 1-84100-051-5

Grant, Francis J. 1948. *The Manual of Heraldry: A concise description of the several terms used, and containing a dictionary of every Designation in the Science*. Edited by Francis J. Grant, K.C.V.O, LL.D., Albany Herald. Edinburgh: John Grant.

How, Jeremiah. 1846. *The Manual of Heraldry, being a concise description of the several terms used, and containing a dictionary of every Designation in the Science, illustrated by four hundred engravings on wood*. London: Jeremiah How.

Lobkowitz, Juan Caramuel. 1636. *Declaración Mystica de las Armas de España*. Bruxelles.

Rietstap, Johannes Baptista. 1857. *Handboek der wapenkunde*. Gouda.

von Hefner, Otto Titan. 1887. *Handbuch der theoretischen und praktischen Heraldik*. Görlitz.

Figures

PURPURE, or *purple*, is expressed by diagonal lines, drawn from the sinister to the dexter side of the shield.

SABLE, or *black*, is expressed by horizontal and perpendicular lines crossing each other.

TENNE, which is *tawny*, or *orange* colour, is marked by diagonal lines drawn from the sinister to the dexter side of the shield, traversed by perpendicular lines from the chief.

SANGUINE is *dark red*, or *murrey* colour; it is represented by diagonal lines crossing each other.

In addition to the foregoing tinctures, there are nine roundlets or balls used in Armory, the names of which are sufficient to denote their colour without expressing the same.

BEZANT, *Or.*   PLATE, *Argent.*

HURTS, *Azure.*   TORTEAUX, *gules.*

GOLPE, *purpure.*   PELLET, *sable.*

ORANGE, *tenne.*   GUZES, *sanguine.*

POMEIS, *vert.*

FURS.

Furs are used to ornament garments of state and denote dignity: they are used in Heraldry, not only for the lining of mantles and other ornaments of the shield, but also as bearings on escutcheons.

WHITE, represented by a plain shield, like argent.

ERMINE — white powdered with black tufts.

ERMINES — field sable, powdering argent.

ERMINOIS — field or, powdering sable.

paintings in ecclesiastical buildings: the escutcheons of maiden ladies and widows are painted on a lozenge-shaped shield. Armorists distinguish several points in the escutcheon in order to determine exactly the position of the bearings or charges. They are denoted in the annexed diagram, by the first nine letters of the alphabet ranged in the following manner:

A   B   C
D
E
F
G   H   I

A, the dexter chief.
B, the precise middle chief.
C, the sinister chief.
D, the honour point.
E, the fess point.
F, the nombril point.
G, the dexter base.
H, the precise middle base.
I, the sinister base.

The dexter side of the escutcheon answers to the left hand, and the sinister side to the right hand of the person that looks at it.

TINCTURES.

By the term *Tincture* is meant that variable hue which is given to shields and their bearings; they are divided into colours and furs.

The colours or metals used in emblazoning arms are—

yellow,	blue,	purple,
white,	black,	orange,
red,	green,	murrey.

These colours are denoted in engravings by various lines or dots, as follows:

OR, which signifies *gold*, and in colour yellow, is expressed by dots.

ARGENT signifies *silver* or *white:* it is left quite plain.

GULES signifies *red:* it is expressed by lines drawn from the chief to the base of the shield.

AZURE signifies *blue:* it is represented by lines drawn from the dexter to the sinister side of the shield, parallel to the chief.

VERT signifies *green:* it is represented by slanting lines, drawn from the dexter to the sinister side of the shield.

B 4

Figure 1. Text from How 1846 (pp. 6–9) describing tincturing and showing various styles of hatching.

Manual of Heraldry

Arms of Family, or paternal arms, are such as are hereditary and belong to one particular family, which none others have a right to assume, nor can they do so without rendering themselves guilty of a breach of the laws of honour punishable by the Earl Marshal and the Kings at Arms.

Arms of Alliance are those gained by marriage.

Arms of Succession are such as are taken up by those who inherit certain estates by bequest, entail, or donation.

Arms of Affection are such as have been assumed out of gratitude to a benefactor, being quartered with the paternal arms. An example of this will be found in the coat of Boyle, Earl of Glasgow, who bears the arms of Boyle, Earl of Burlington, quarterly with the arms of the earldom, as a mark of affection.

SHIELDS, TINCTURES, FURS, ETC.

The *Shield* contains the field or ground whereon are represented the charges or figures that form a coat of arms. These were painted on the shield before they were placed on banners, standards, and coat armour; and wherever they appear at the present time they are painted on a plane or superficies resembling a shield.

Shields in heraldic language are called Escutcheons or Scutcheons, from the Latin word *scutum*. The forms of the shield or field upon which arms are emblazoned are varied according to the taste of the painter. The Norman pointed shield is generally used in heraldic paintings in ecclesiastical buildings: the escutcheons of maiden ladies and widows are painted on a lozenge-shaped shield. Armorists distinguish several points in the escutcheon

Manual of Heraldry

25A5 GULES signifies *red*: it is expressed by lines drawn from the chief to the base of the shield.

25A4 AZURE signifies *blue*: it is represented by lines drawn from the dexter to the sinister side of the shield, parallel to the chief.

25A7 VERT signifies *green*: it is represented by slanting lines, drawn from the dexter to the sinister side of the shield.
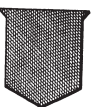
25A8 PURPURE, or *purple*, is expressed by diagonal lines, drawn from the sinister to the dexter side of the shield.

25A6 SABLE, or *black*, is expressed by horizontal and perpendicular lines crossing each other.

2B63 TENNE, which is *tawny*, or *orange* colour, is marked by diagonal lines drawn from the sinister to the dexter side of the shield, traversed by perpendicular lines from the chief.

Tinctures

in order to determine exactly the position of the bearings or charges. They are denoted in the annexed diagram, by the first nine letters of the alphabet ranged in the following manner:—

A, the dexter chief.
B, the middle chief.
C, the sinister chief.
D, the honour point.
E, the fess point.
F, the nombril point.
G, the dexter base.
H, the middle base.
I, the sinister base.

The dexter side of the escutcheon answers to the left hand, and the sinister side to the right hand of the person who looks at it.

TINCTURES

By the term *Tincture* is meant that variable hue which is given to shields and their bearings; they are divided into metals, colours, and furs.

These colours are denoted in engravings by various lines or dots, a system invented by an Italian in the beginning of the seventeenth century, as follows:—

OR, which signifies *gold*, and in colour yellow, is expressed by dots. **2B60**

ARGENT signifies *silver* or *white*: it is left quite plain. **25A1**

Furs

SANGUINE is *dark red*, or *murrey* colour: it is represented by diagonal lines crossing each other.

These last two tinctures are not of common occurrence.

In addition to the foregoing tinctures, there are ten roundels or balls used in armory, the names of which are sufficient to denote their colour without expressing the same. For these charges, see under the following titles in the Dictionary, viz.:—Bezant, Fountain, Golpe, Guzes, Hurts, Orange, Pellet, Plate, Pomeis, and Torteaux.

FURS

Furs are used to ornament garments of state and denote dignity: they are used in heraldry, not only for the lining of mantles of sovereigns and peers and other ornaments of the shield, but also as tinctures on escutcheons.

WHITE, represented by a plain shield, like argent.

ERMINE, white powdered with black tufts.
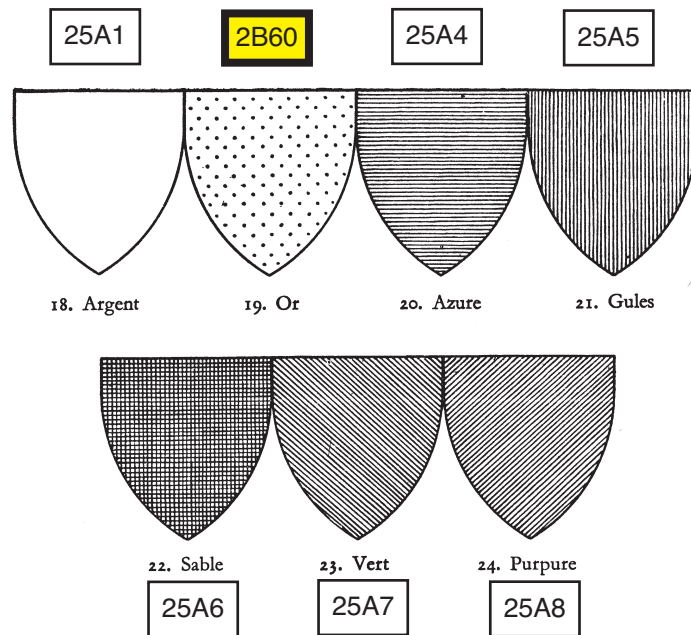
ERMINES, field sable, powdering argent.

ERMINOIS, field or, powdering sable.

Figure 2. Text from Grant 1948 (pp. 16–19) describing tincturing and showing various styles of hatching.
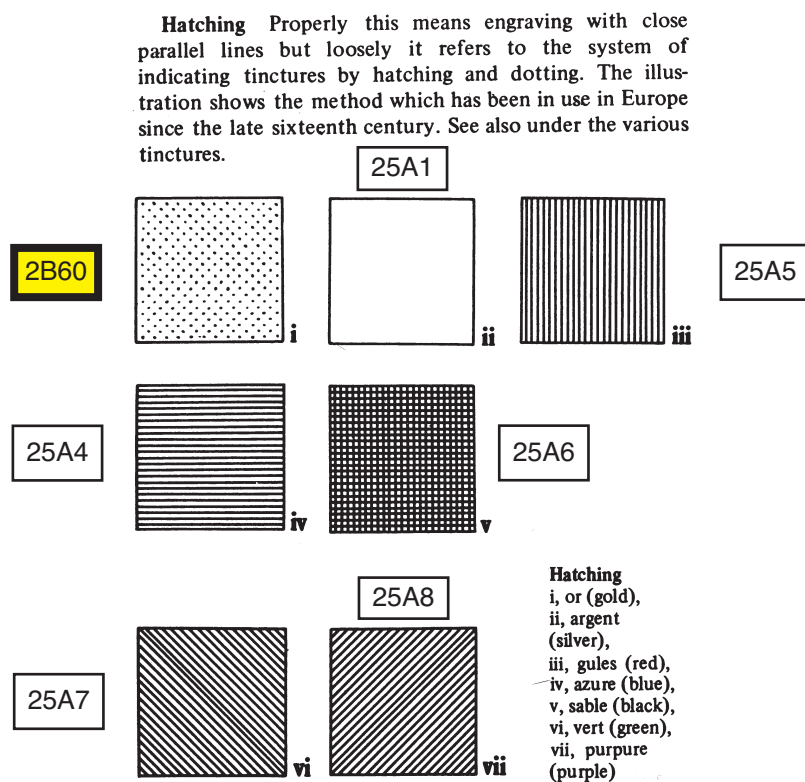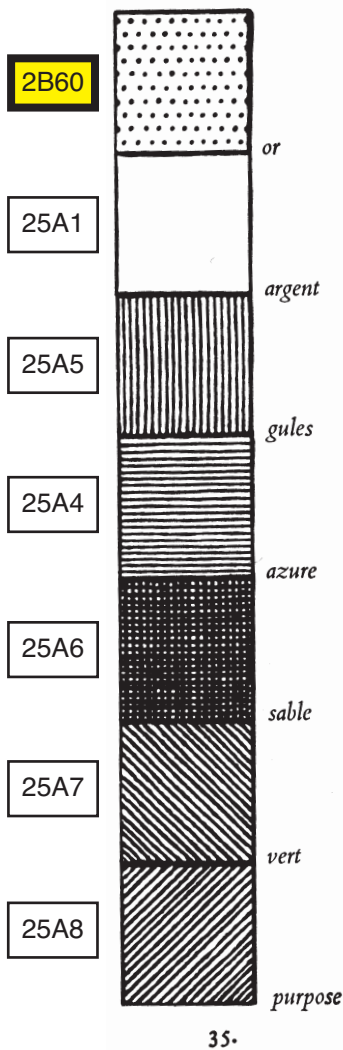
Figure 3. Text from Boutell 1978 describing tincturing and showing various styles of hatching.

Figure 4. Text from Brooke-Little 1985 describing tincturing and showing various styles of hatching.

it should be depicted in its really correct tones or tints, without any attempt to assimilate these with any heraldic tincture. It will not be found in the very ancient coats of arms, and its use is not to be encouraged. When a natural animal is found existing in various colours it is usual to so describe it, for the term 'proper' alone would leave uncertainty. For instance, the crest of the Lane family, which was granted to commemorate the ride of King Charles II behind Mistress Jane Lane as her servant, in his perilous escape to the coast after the disastrous Battle of Worcester, is blazoned 'a strawberry roan horse, couped at the flanks proper, bridled sable, and holding between the feet an Imperial crown also proper'. Lord Cowper's supporters were, on either side of the escutcheon, 'a light dun horse proper, with a large blaze down the face, the mane close shorn except a tuft on the withers, a black list down the back, a bob tail, and the near fore-foot and both hind feet white'. Another instance that might be quoted are the supporters of Lord Newlands, which are: 'On either side a dapple-grey horse proper, gorged with a riband and suspended therefrom an escutcheon gules, charged with three bezants in chevron.' The crest of the family of Bewes, of St Neots, Cornwall, is: 'On a chapeau gules, turned up ermine, a pegasus rearing on his hind legs of a bay colour, the mane and tail sable, winged or, and holding in the mouth a sprig of laurel proper.'

There are and were always many occasions in which it was desired to represent armorial bearings in black and white, or where from the nature of the handicraft it was impossible to make use of actual colour. But it should always be pointedly remembered that unless the right colours of the arms could be used the tinctures were entirely ignored in all matters of handicraft until the seventeenth century. Various schemes of hatchings, however, were adopted for the purpose of indicating the real heraldic colours when arms were represented and the real colours could not be employed, the earliest being that of Francquart in Belgium, *circa* 1623. Woodward says this was succeeded by the systems of Butkens, 1626; Petra Sancta, 1638; Lobkowitz, 1639; Gelenius; and De Rouck, 1645; but all these systems differed from each other, and were for a time the cause of confusion and not of order. Eventually, however, the system of Petra Sancta (the author of *Tesseræ Gentilitia*) superseded all the others, and has remained in use up to the present time.

Upon this point Herr Ströhl in his *Heraldischer Atlas* remarks: 'The system of hatching used by Marcus Vulson de la Colombière, 1639, in the course of time found acceptance everywhere, and has maintained itself in use unaltered until the present day; these are shown in 35, only that later, hatchings have been invented for brown, grey, &c.; which, however, seems rather a superfluous enriching.' None of these later creations, by the way, have ever been used in this country. For the sake of completeness, however, let them be mentioned (see 36): *a*, brown; *b*, blood-red; *c*, earth-colour; *d*, iron-grey; *e*, water-colour; *f*, flesh-colour; *g*, ashen-grey; *h*, orange; and *i*, colour of nature. In English armory 'tenné' is represented by a combination of horizontal (as azure) lines with diagonal lines from sinister to dexter (as purpure), and sanguine or murrey by a combination of diagonal lines from dexter to sinister (as vert), and from sinister to dexter (as purpure).

The hatchings of the shield and its charges always accommodate themselves

Figure 5. Text from Fox-Davies 1985 describing tincturing and showing various styles of hatching. (This is one of the most authoritative of texts on heraldry.)

to the angle at which the shield is placed, those of the crest to the angle of the helmet. A curious difficulty, however, occurs when a shield, as is so often the case in this country, forms a part of the crest. Such a shield is seldom depicted quite upright upon the wreath. Are the tincture lines to follow the angle of the smaller shield in the crest or the angle of the helmet? Opinion is by no means agreed upon the point.

But though this system of representing colours by 'hatching' has been adopted and extensively made use of, it is questionable whether it has ever received official sanction, at any rate in Great Britain. It certainly has never been made use of in any *official* record or document in the College of Arms. Most of the records are in colour. The remainder are all without exception 'tricked', that is, drawn in outline, the colours being added in writing in the following contracted forms: 'O', or 'or', for or; 'A', 'ar', or 'arg', for argent; 'G', or 'gu', for gules; 'Az', or 'B' (for blue, owing to the likelihood of confusion between 'ar' and 'az', 'B' being almost universally used in old trickings), for azure; 'S', or 'sa', for sable; 'Vt' for vert, and 'Purp' for purpure. It is unlikely that any change will be made in the future, for the use of tincture lines is now very rapidly being discarded by all good heraldic artists in this country. With the reversion to older and better forms and methods these hatchings become an anachronism, and save that sable is represented by solid black they will probably be unused and forgotten before very long.

The plain, simple names of colours, such as red and green, seemed so unpoetical and unostentatious to the heralds and poets of the Middle Ages, that they substituted for gold, topaz; for silver, pearl or 'meergries'; for red, ruby; for blue, sapphire; for green, emerald; and for black, diamond or 'zobel' (sable, the animal, whence the word 'sable'). Let the following blazonment from the grant of arms to Mödling bei Wien in 1458 serve as example of the same: 'Mit namen ain Schilt gleich getailt in fasse, des ober und maister tail von Rubin auch mit ainer fasse von Berlein, der under thail von grunt des Schilts von Schamaragaden, darinneain Pantel von Silber in Rampannt'—(*lit.* 'Namely, a shield equally divided in fess, the upper and greater part of ruby, also with a fess of pearl, the under part of the field of the shield of emerald, therein a panther of silver, rampant'); that is, 'Per fess gules and vert, in chief a fess argent, in base a panther rampant of the last.'

Even the planets, and, as abbreviations, their astronomical signs, are occasionally employed: thus, the *sun* for gold, the *moon* for silver, *Mars* for red, *Jupiter* for blue, *Venus* for green, *Saturn* for black, and *Mercury* for purple. This aberration of intellect on the part of medieval heraldic writers, for it really amounted to little more, had very little, if indeed it had any, English official recognition. No one dreams of using such blazon at the present time, and it might have been entirely disregarded were it not that Guillim sanctions its use; and he being the high priest of English armory to so many, his example has given the system a certain currency. I am not myself aware of any instance of the use of these terms in an English patent of arms.

The furs known to heraldry are now many, but originally they were only two, 'ermine' and 'vair'. Ermine, as every one knows, is of white covered with black spots, intended to represent the tails of the animal. From ermine has been evolved the following variations, viz. ermines, erminois, pean, and erminites. 'Ermines' is
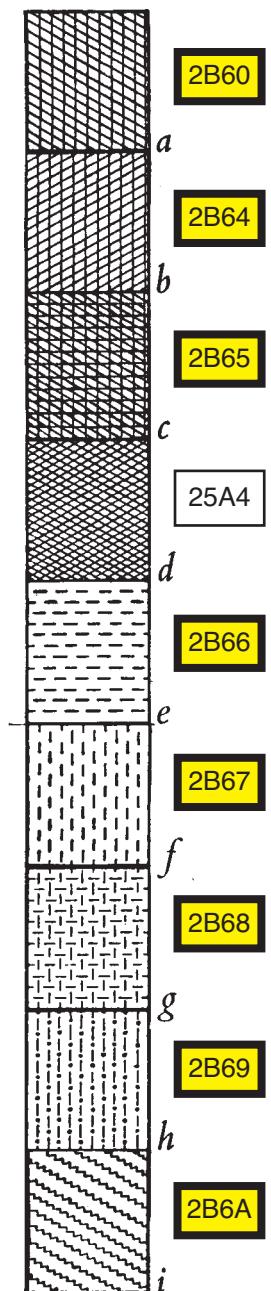
Figure 6. Text from Fox-Davies 1985 describing tincturing and showing various styles of hatching. (This is one of the most authoritative of texts on heraldry.)

Metals, Colours & Furs

An heraldic 'trick'

Argent on a Chevron Gules
between three Lions rampant
Sable three Crescents Or

Petra Sancta hatchings
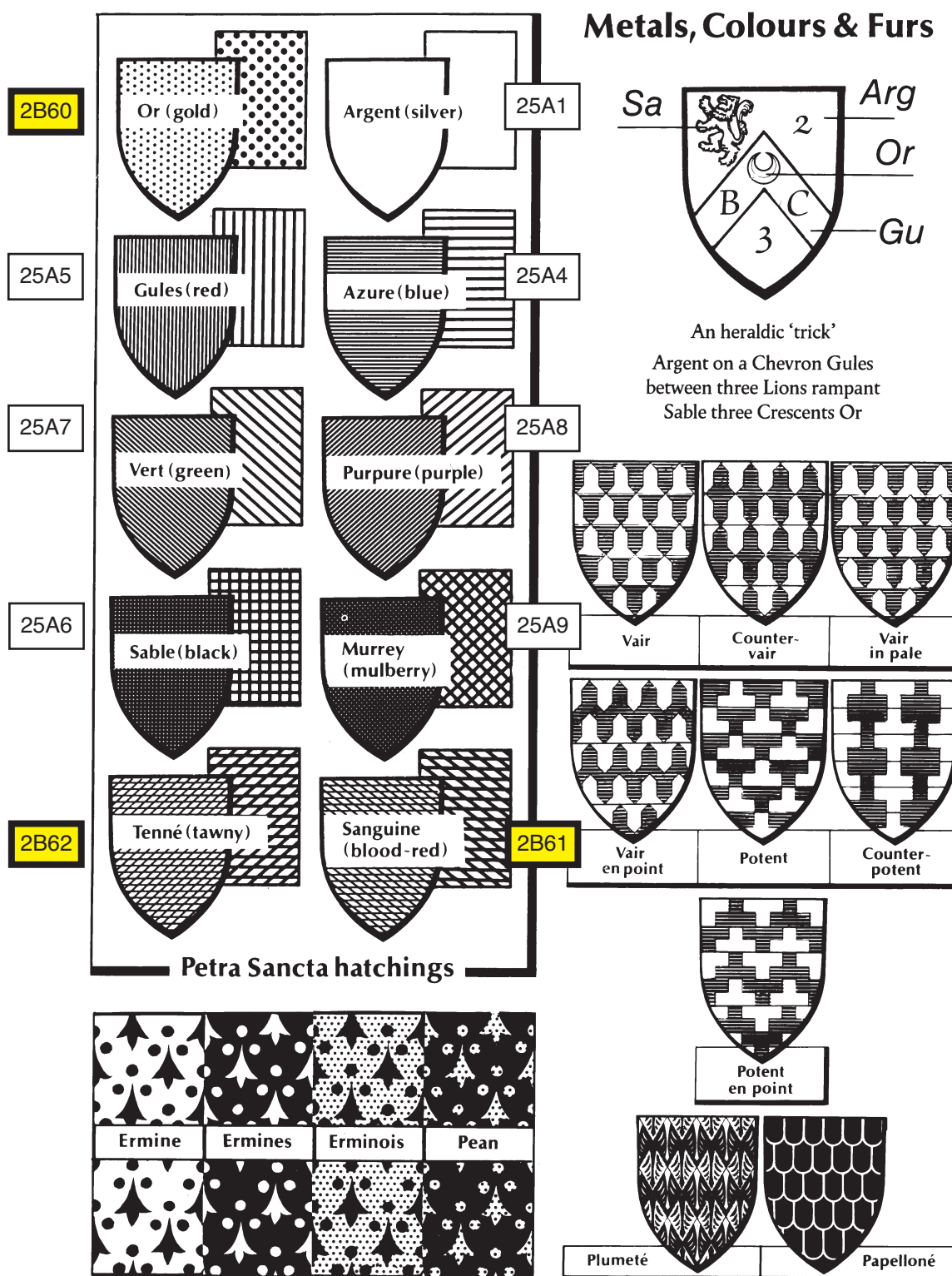
Figure 7. Chart from Friar and Ferguson 1993 describing tincturing and showing various styles of hatching.

Various hatching systems. On the table X of Hefner there are totally wrong hatching tables of Butkens and Gelenius (which are identical in the reality) (compare the hatching tables), and the hatching table of Francquart has some errors. On the table II of Bárczay the hatching tables of Butkens and Francquart are totally wrong (compare the hatching tables), and the table of Gelenius has some errors. In the table II of Bárczay there are different hatching systems of Juan Caramuel Lobkowitz: one of "the Spaniard" Caramuel, and another one of "the Czech" Lobkowitz. It seems that Caramuel Lobkowitz has really used two different systems of hatching. The hatching table in his 1636 work (*Declaración Mystica de las Armas de España*) fits (with some minor errors) to the hatching system of "the Spaniard" Caramuel. Rietstap does not know it because he has only handled the six main heraldic tinctures. Bárczay published it with some minor errors, but under the year of 1639. (The only mistake he has made was that the hatching of the ticture puniceo being used for the colour purpure, and the hatching of morado [purpure] for the iron.) In the book of Rietstap we can find a hatching system of (Caramuel) Lobkowitz from 1639-1642. As regards the six main heraldic tinctures, it is identical with the 1636 hatching table. (The only minor difference was that Lobkowitz, according to his own words, designated the color vert by horizontal lines and dots, while Rietstap applied for it some intermittent lines and dots.) However, Rietstap did not quote his exact source, just the year 1639-1642. By all probability, it was be the 1639 book of Caramuel Lobkowitz on the genealogy of Portugal rulers, titled *Philippus prudens*, which had a 1642 London issue, and in 1641 it was even published in French. In the above table, it was shown under the hatching system of Lobkowitz. However, in the mentioned 1639 book there was neither a hatching table, nor a description of hatching system, in spite that there are several coherently hatched arms, but if we'll examine these hatchings, we will be able to compile a different hatching table of tinctures. (See the picture captions.) For this reason, under the name Lobkowitz there we can find a hatching system as published by Rietstap. Above the six main heraldic tinctures, in the 1636 hatching table of Caramuel Lobowitz we can also find the hatching of Purpure (morado), and Orange (puniceo), not mentioned neither by Rietstap, nor by Hefner. We can find them only at Bárczay. The colour puniceo usually referred to some pink or reddish tint. However, during the 17th and 18th centuries it was routinely used to indicate some shade of orange or orange-red. (In the book of Bárczay it was applied for the color purpure, but puniceo was also widely used as purple.) By all probability, Caramuel Lobkowitz, who spent a long time in te Low Countries (even his 1636 book was published in Brussels), applied orange for his hatching system, because it was widely used as a heraldic tincture in Holland. At the symbolic explanation of arms of Burgundy and Brabant, Caramuel Lobkowitz translated to Hebrew the name of Jesus according to kabbalists and rabbis as an orange blossom, the flower of the mankind.

Figure 8. http://en.wikipedia.org/wiki/Hatching_system.

Figure 9. http://en.wikipedia.org/wiki/Hatching_system
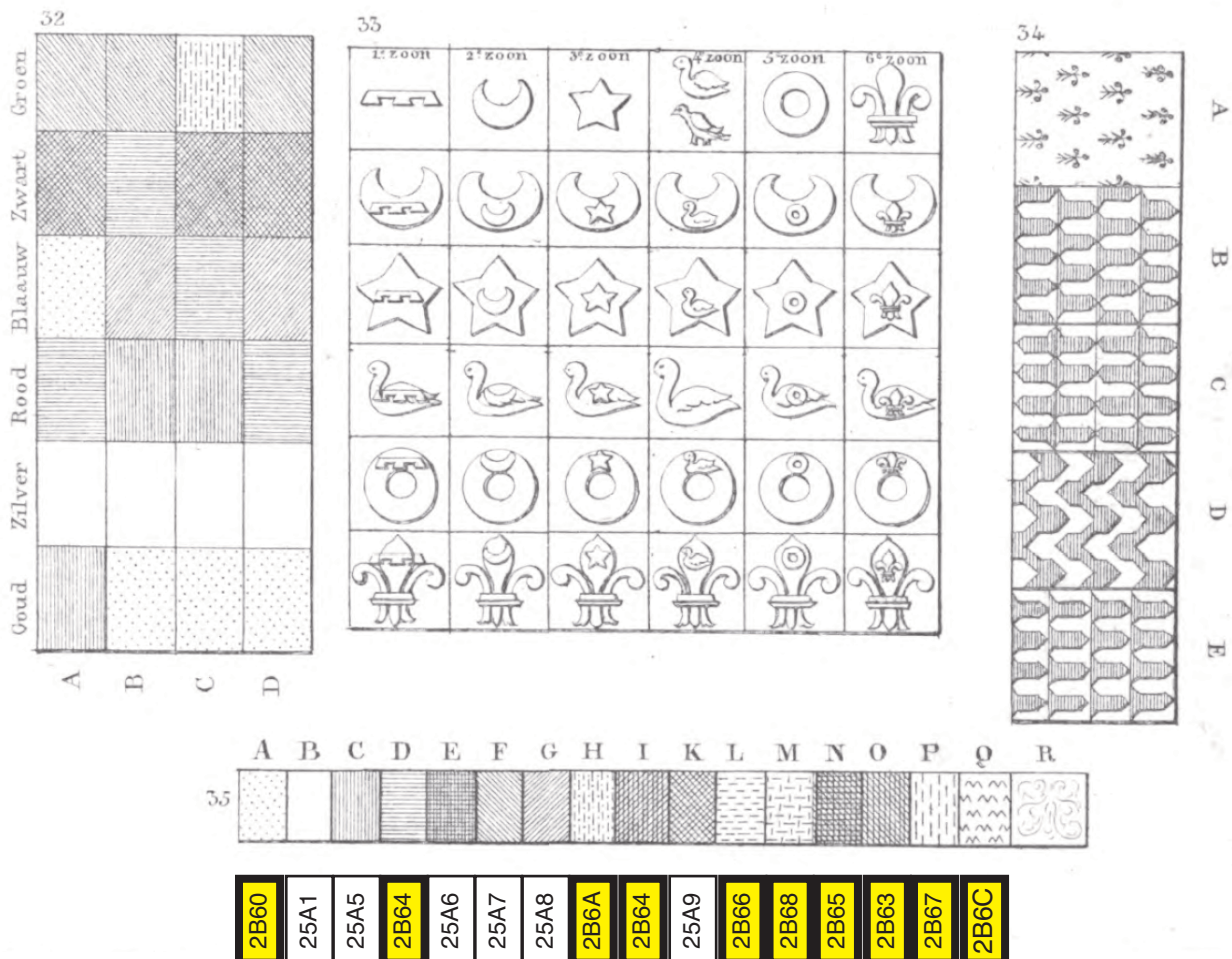
Figure 10. Chart from Rietstap 1857 showing various styles of hatching. From A to R, the patterns are: A. goud (Or), B. zilver (Argent), C. rood (Gules), D. blaauw (Azure), E. zwart (Sable), F. groen (Vert), G. purper (Purpure), H. oranjekleur (Orange), I. bloedekleur (blood-red), K. ijzenkleur (iron-grey), L. staal- of waterkleur (steel or water colour), M. aschkleur (ashen-grey), N. aardekleur (earth colour), O. bruine kleur (brown), P. vleeschkleur (flesh-colour), Q. natuurlijke kleur (proper), R. damascering. The last of these, demascening, is not a generally recognized hatching and so has not been proposed.
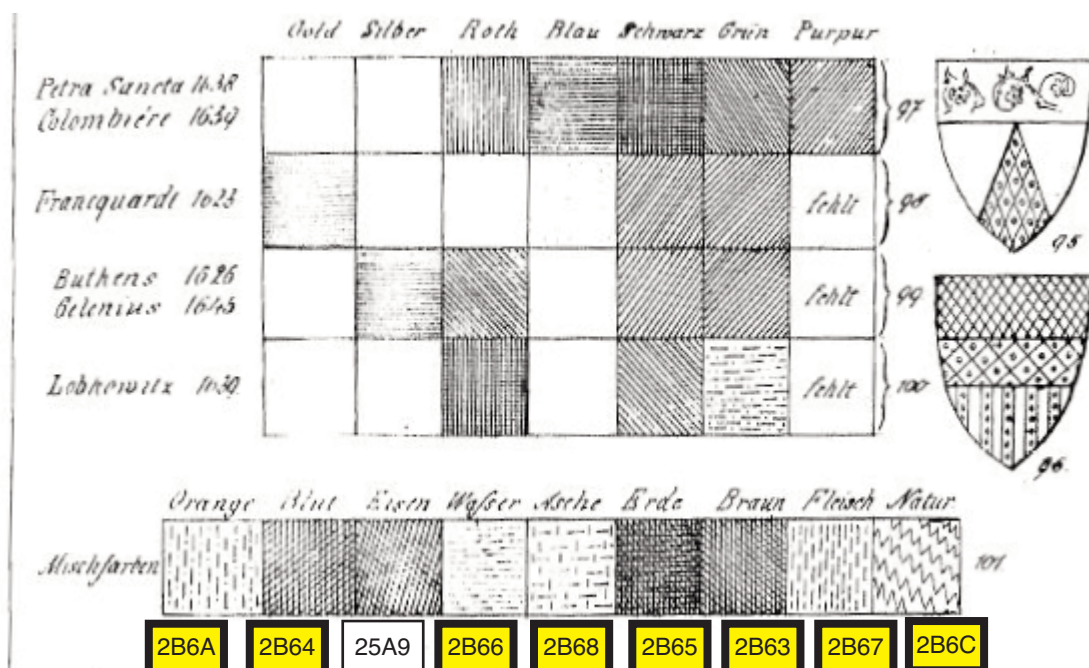
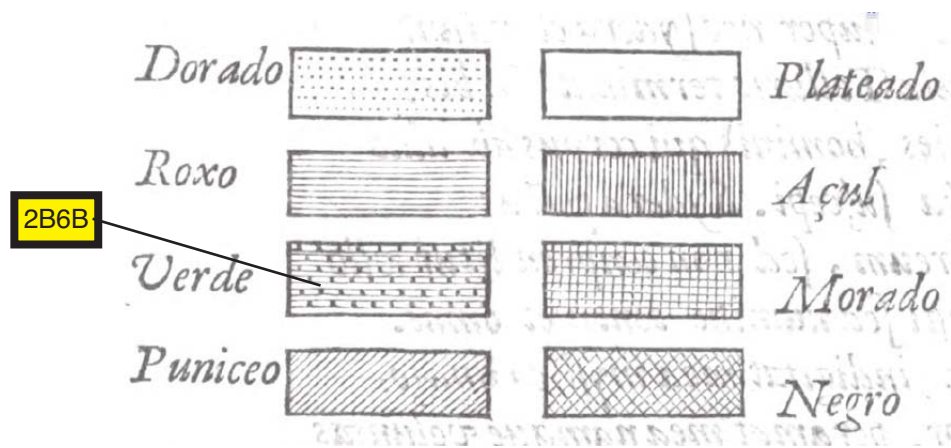**Figure 11.** Text from von Hefner 1887 showing various styles of hatching.

16

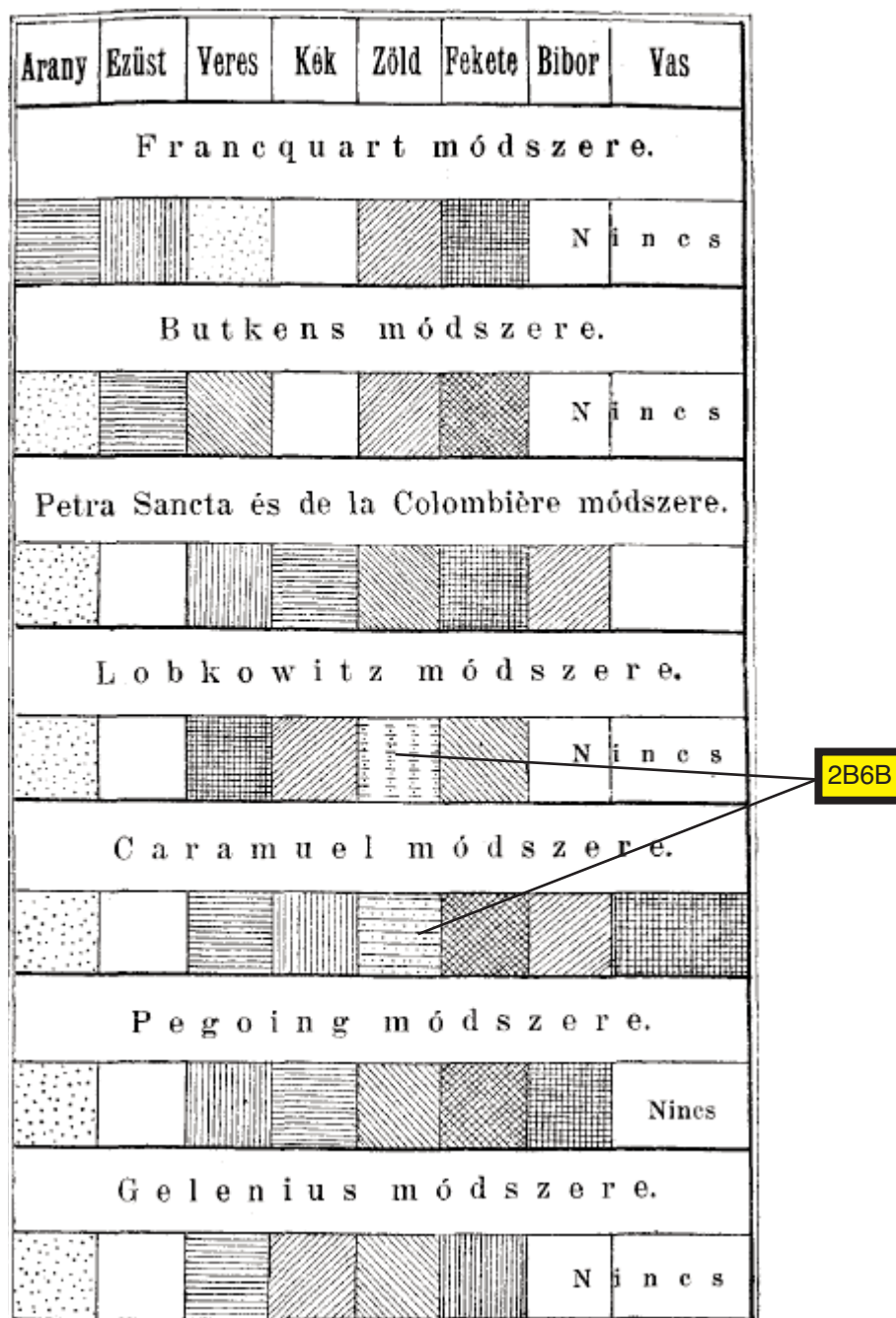**Figure 12.** Text from Lobkowitz 1636 showing various styles of hatching.

Figure 13. Text from Bárczay 1897 showing various styles of hatching.

A. Administrative

1. Title

Proposal to add heraldic hatching characters to the UCS

2. Requester's name

Michael Everson

3. Requester type (Member body/Liaison/Individual contribution)

Individual contribution.

4. Submission date

2011-04-01

5. Requester's reference (if applicable)

6. Choose one of the following:

6a. This is a complete proposal

Yes.

6b. More information will be provided later

No.

B. Technical – General

1. Choose one of the following:

1a. This proposal is for a new script (set of characters)

No.

1b. Proposed name of script

1c. The proposal is for addition of character(s) to an existing block

Yes

1d. Name of the existing block

Miscellaneous Symbols and Arrows

2. Number of characters in proposal

18.

3. Proposed category (A-Contemporary; B.1-Specialized (small collection); B.2-Specialized (large collection); C-Major extinct; D-Attested extinct; E-Minor extinct; F-Archaic Hieroglyphic or Ideographic; G-Obscure or questionable usage symbols)

Category B.1.

4a. Is a repertoire including character names provided?

Yes.

4b. If YES, are the names in accordance with the "character naming guidelines"?

Yes.

4c. Are the character shapes attached in a legible form suitable for review?

Yes.

5a. Who will provide the appropriate computerized font (ordered preference: True Type, or PostScript format) for publishing the standard?

Michael Everson.

5b. If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) and indicate the tools used:

Michael Everson, Fontographer.

6a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?

Yes.

6b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?

Yes.

7. Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)?

No.

8. Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script.

See above.

C. Technical – Justification

1. Has this proposal for addition of character(s) been submitted before? If YES, explain.

No.

2a. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)?

Yes.

2b. If YES, with whom?

The author is a member of the user community (publisher of a book on Irish heraldry).

2c. If YES, available relevant documents

3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included?

People interested in heraldry and vexillology.

4a. The context of use for the proposed characters (type of use; common or rare)

Specialized.

4b. Reference

5a. Are the proposed characters in current use by the user community?

Yes.

5b. If YES, where?

Publications about heraldry.

6a. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP?

Yes.

6b. If YES, is a rationale provided?

Yes.

6c. If YES, reference

Keep with other similar geometric symbols.

7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?

No.

8a. Can any of the proposed characters be considered a presentation form of an existing character or character sequence?

No.

8b. If YES, is a rationale for its inclusion provided?

8c. If YES, reference

9a. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?

No.

9b. If YES, is a rationale for its inclusion provided?

9c. If YES, reference

10a. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character?

No.

10b. If YES, is a rationale for its inclusion provided?

10c. If YES, reference

11a. Does the proposal include use of combining characters and/or use of composite sequences?

No.

11b. If YES, is a rationale for such use provided?

11c. If YES, reference

11d. Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?

11e. If YES, reference

12a. Does the proposal contain characters with any special properties such as control function or similar semantics?

No.

12b. If YES, describe in detail (include attachment if necessary)

13a. Does the proposal contain any Ideographic compatibility character(s)?

No.

13b. If YES, is the equivalent corresponding unified ideographic character(s) identified?