Typography papers 7

The ‘Plaque Découpée Universelle’: a geometric sanserif in 1870s Paris

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Corrections

None.

Eric Kindel

The 'Plaque Découpée Universelle': a geometric sanserif in 1870s Paris

This short essay investigates the 'Plaque Découpée Universelle', a lettering device invented in the United States in 1876, and exhibited and sold in Paris at the 1878 Exposition Universelle and elsewhere. The device and associated promotional items are shown, and the concepts underlying its geometric sanserif characters explored through patent documents and promotional texts. The invention is then broadly situated relative to contemporary French education and culture, and to early twentieth-century experiments in letterform design.

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Thursday 17 February 2005 was Justin Howes's last visit to the Department of Typography & Graphic Communication. He was in that day for a seminar presentation of his doctoral research in progress (see this volume, p. 61). Some weeks before, Justin had emailed with news of recent acquisitions: several items related to stencilling he thought I might find of interest and that he would readily sell on. Like many of his colleagues, I was a regular beneficiary of Justin's foraging and he had already supplied me with finds of much value to my own research. On this occasion, one item among the several caught my attention, a lettering device of the 1870s. I replied that I would happily relieve him of this treasure and, after an impatient wait, I gratefully received it when Justin arrived that Thursday. It proved even better than imagined. The 'Plaque Découpée Universelle' is now presented here, on its own merits but equally as the gift of Justin's indefatigable seeking out of artefacts and narratives that complicate the history of letterforms in the most stimulating ways.

Plaque Découpée Universelle

The Plaque Découpée Universelle is best described as a lettering guide. Its vertical, horizontal, curved and angled guidelines are so configured that from them any letter or numeral may be constructed. The device (figure 1, overleaf) was introduced to France at the 1878 Exposition Universelle, where it was exhibited and sold in the United States section, and awarded a *mention honorable*. Elsewhere in Paris, it was available for sale in the passage Jouffroy (one of a number of *passages* in the vicinity of the Bourse) or in bulk at the inventor's lodgings in the avenue du Maine in the 14th arrondissement (Montparnasse). An illustrated circular (figure 2) survives with the guide; scribbled on the back is a note apparently recording the guide's purchase. A two-sided broadsheet is also extant (figure 3, a–b), displaying the guide's complete scheme of characters and ornamental borders. The ensemble is packaged in a heavy paper envelope.[1]

1. The note on the circular reads: 'achetè [*sic*] au passage Jouffroy, Paris, par A. D. Pledger pendant son sejour à Paris, dans le magazin ~~chez N~~ du soiries en gros, [7] Robert, Rue de la Banque, Paris, ~~1887~~, 1878, AP' (commas added). It is unclear if the date of purchase noted is correct: a statement printed on the back of the broadsheet indicates that guides made of metal for generating characters 8 cm in height – a description that matches the surviving guide – only became available in January 1879, thus giving a not-earlier-than date for the broadsheet and the guide. As the circular makes no mention of metal guides (they are described instead as made of card [*carton*]) and has as its latest internal date 26 October 1878, it was probably issued in the last two months of 1878, or very early 1879. It is possible that the note on the circular was written some time after the guide was purchased.

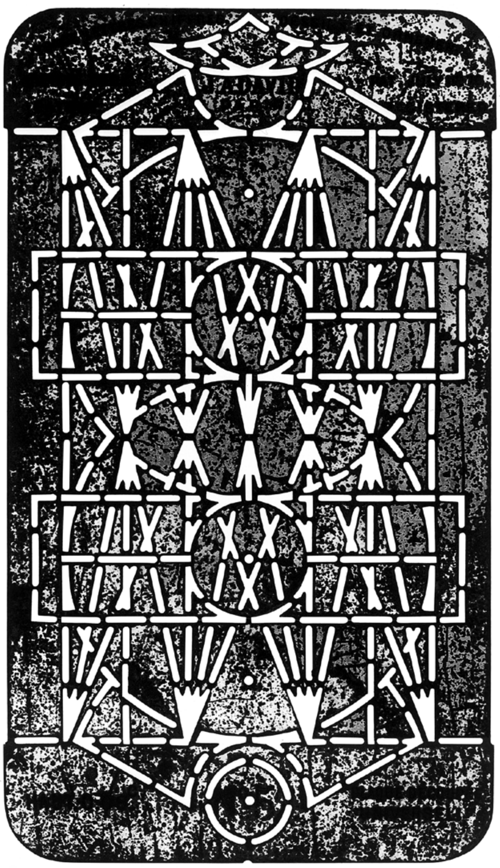


Figure 1. Plaque Découpée Universelle, guide, *c.* 1879, etched and chromed tin/zinc plate, actual size (113 × 65 mm).

Figure 2 (right). Plaque Découpée Universelle, advertising circular, 1878/9, 266 × 202 mm.

Figure 3a (opposite). Plaque Découpée Universelle, broadsheet (front), *c.* 1879, 650 × 500 mm. Due to age and poor paper quality, the broadsheet has dissociated into 16 sections along its original fold lines. It is digitally re-assembled here and in fig. 3b (p. 74).

GRAND SUCCÈS DE L'EXPOSITION AMÉRICAINE

Plaque Découpée Universelle
DE J. A. DAVID
Breveté en France et a l'Etranger
POUR TRACER GÉOMÉTRIQUEMENT
LES LETTRES, LES CHIFFRES & LES ORNEMENTS

Le savez-vous déjà, il paraît certain que les Chinois se servent de 90 mille caractères pour écrire leur langue.

L'inventeur du dessin ci-contre, M. J.-A. David, prouve qu'avec ce dessin unique, découpé, ressemblant en quelque sorte à un caractère chinois, il peut tracer d'une façon correcte et géométrique, en lettres majuscules et minuscules, toutes nos langues modernes, toutes celles qui dérivent du grec et du latin, telles que : le français, l'anglais, l'italien, l'espagnol, etc. Il trace en outre tous les chiffres, tous les accents, tous les signes de ponctuation, ainsi qu'une variété illimitée d'ornements géométriques avec lignes doubles ou simples. L'alphabet grec se trace aussi avec ce type.

Avec l'aide de cette plaque et de la clef explicative qui l'accompagne, toute personne, même un enfant intelligent de dix ans, peut apprendre en quelques heures à tracer une affiche élégante et correcte.

Elle est indispensable pour tracer les affiches dans tous les magasins.

Tout homme ayant à faire des enseignes devrait en posséder une, car, dans cette simple plaque, il a un cours complet du dessin de la lettre et des chiffres ; il apprendra, en outre, à tracer une quantité infinie de dessins pour bandes, bordures, panneaux, etc.

Dans la famille il sera un jeu amusant et intelligent pour les jeunes gens et les jeunes filles, car, en outre des lettres, des chiffres et des ornements, ils y trouveront tous les éléments du dessin linéaire.

La plaque découpée universelle est en vente à l'Exposition universelle, section des Etats-Unis, Galerie des Machines, en papier-carte fort à 1 fr. avec la clef. E. S.

(Extrait du journal l'*Exposition* de 1878)

Paris, 25 octobre 1878.

Monsieur le rédacteur en chef,

Comme je vous sais tout disposé à divulguer ce qui peut être utile aux lecteurs de l'*Education*, je tiens à vous faire connaître la *plaque découpée universelle* que j'ai examinée dans la galerie des machines de la section des Etats-Unis, au milieu d'une foule de visiteurs.

Cette plaque en carton découpé, d'environ 13 centimètres de longueur sur 6 de largeur, permet de tracer d'une façon correcte et géométrique toutes les lettres de l'alphabet majuscules, minuscules, accents, virgule, point), les chiffres arabes, l'alphabet grec, et une foule innombrable de dessins.

Tout instituteur pourra, à l'aide de cette seule plaque, composer des jeux de lettres mobiles pour faire les leçons de lecture d'après la méthode naturelle au maternelle (1), pour tapisser les murs de son école de sentences morales, pour exposer aux yeux de ses élèves un trait d'histoire, une règle de grammaire.

La *plaque découpée universelle* est si simple qu'un enfant de dix ans peut dans quelques minutes en apprendre le maniement. Entre les mains des élèves, elle sera une source intarissable d'amusements, en les aidant à dessiner géométriquement les ornements les plus variés et les plus surprenants.

La *plaque découpée universelle* de M. J. A. David coûte un franc seulement, et tout acheteur a droit à la clef du système.

Une lettre très-chaleureuse a été adressée à M. Bardoux par un journaliste français, M. Victor Nadal, qui le prie de recommander l'introduction de ce merveilleux petit instrument dans tous les établissements d'instruction publique. Pour moi, je compte surtout sur les lumières et l'amour du progrès de nos bons instituteurs, qui ne tarderont pas à adopter la *plaque* de M. David, quand ils seront, comme moi, convaincus de son excellence.

Veuillez agréer, etc.

G. T.

(Extrait du journal l'*Education* du 26 octobre, page 676.)

(1) Cette méthode a été exposée dans l'*Education*, par M. Théodore.

EN VENTE

Détail : 26, Passage Jouffroy.

Détail et gros : Chez l'inventeur, 69, avenue du Maine.

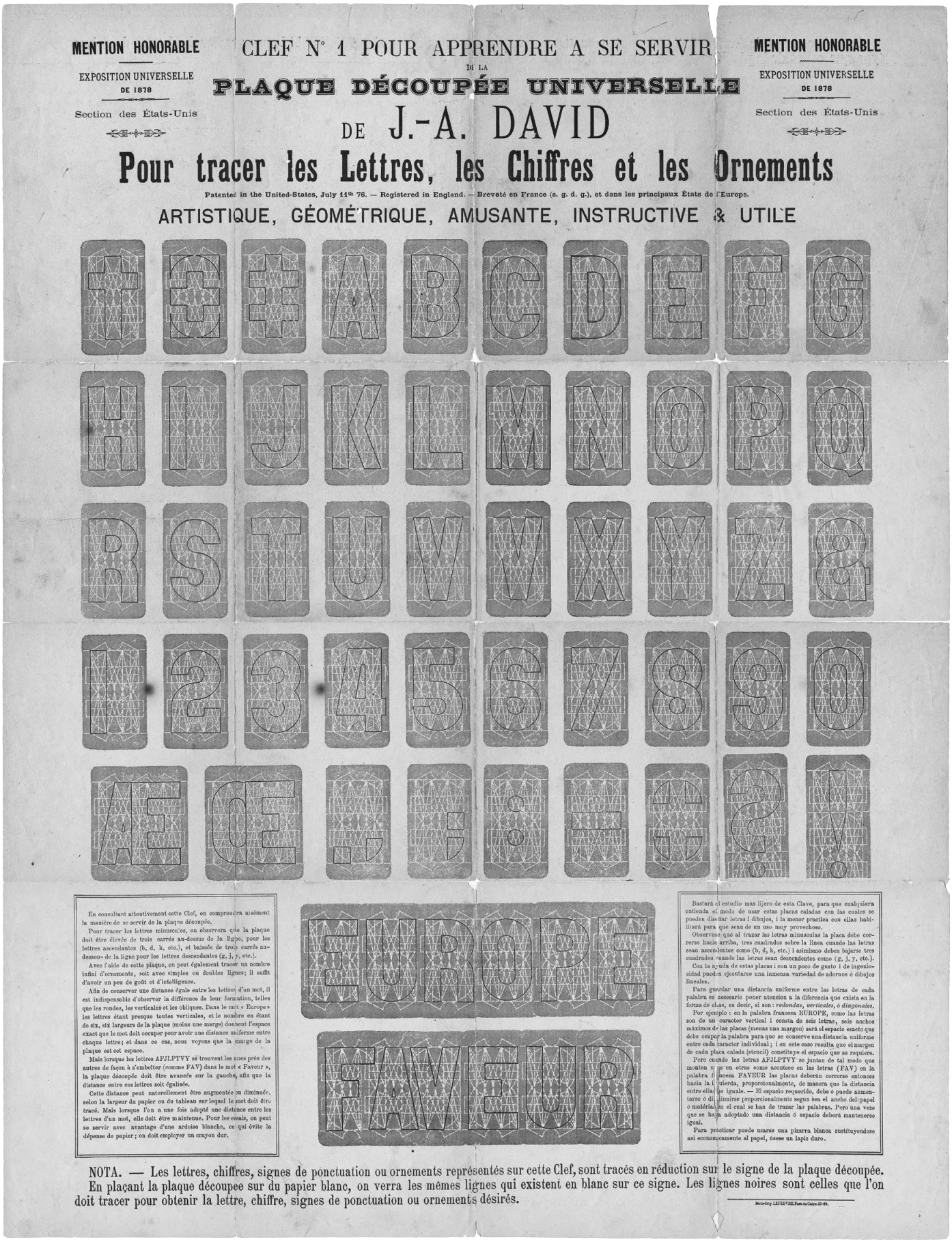
Prix, avec clef explicative . . . . 1 fr.
Par la poste, franco *pour Paris, la France et l'Europe (Union postale) en timbres ou mandats-postes* 1 10

NOTA. — Toutes les correspondances doivent être adressées chez l'inventeur, 69, avenue du Maine, Paris.

FORTE REMISE POUR LES ACHATS EN GROS

Prière de communiquer ce Prospectus aux personnes auxquelles cette invention pourrait être utile.

Paris. — Typ. Malverge et Dubourg, rue du Cardinal-Lemoine, 41.



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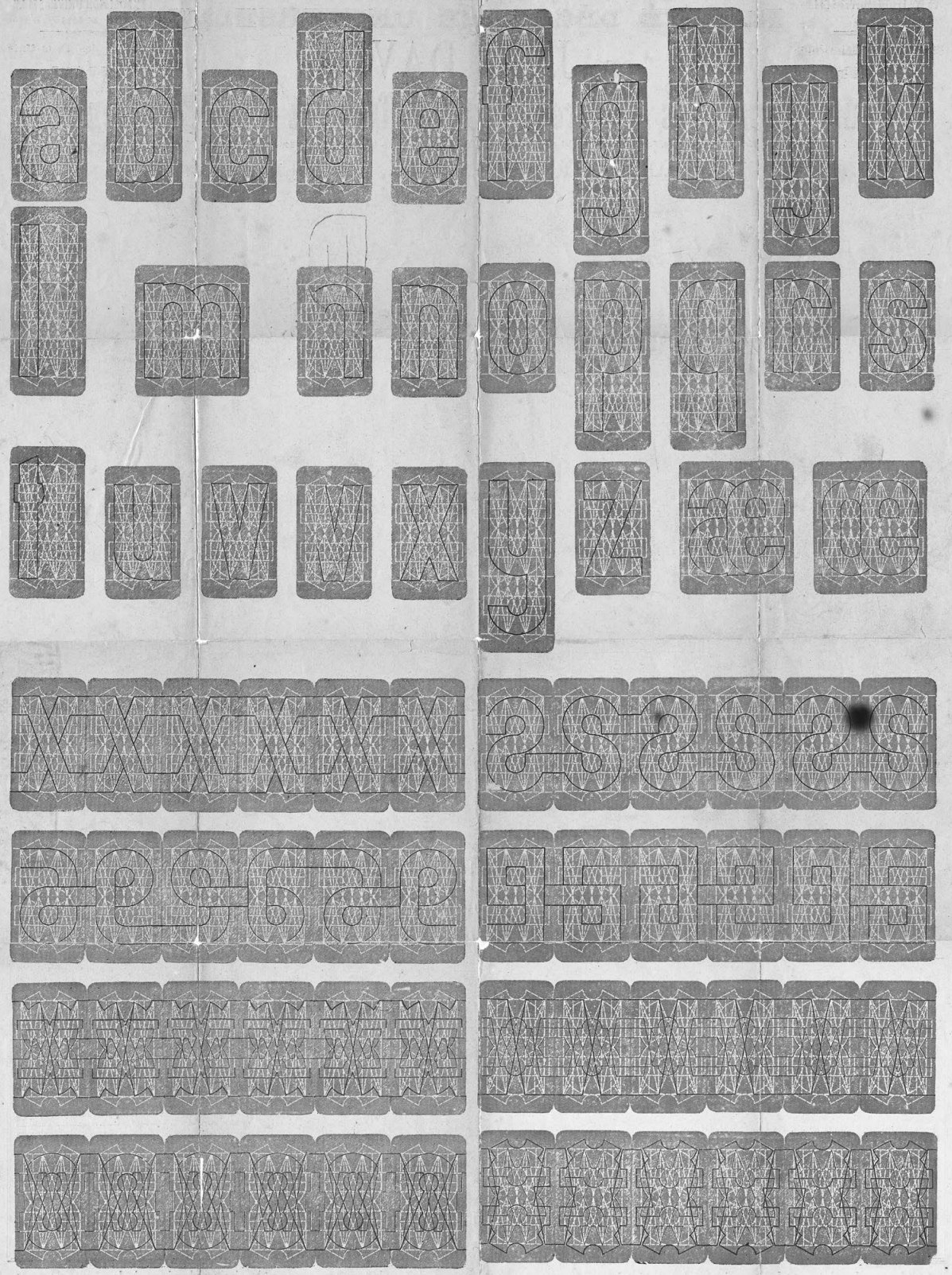
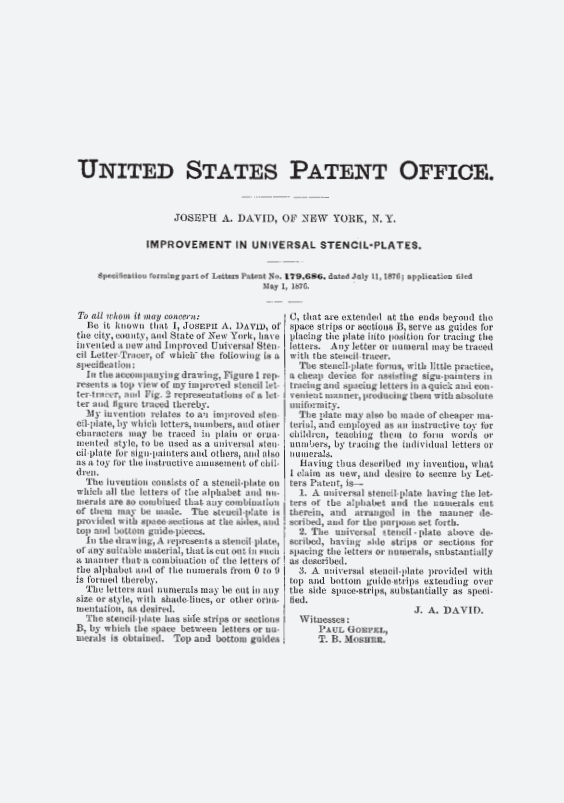
Dans le courant de Janvier 1879, l'inventeur mettra en vente une plaque découpée, *EN METAL,* pour tracer des lettres de même type que celles de la plaque existante, mais de 8 centimètres de hauteur.



Une variété innombrable d'Ornements dans les styles ci-dessus, peuvent être tracés avec la Plaque découpée universelle.

En vente chez les Papetiers et Libraires, et chez l'Inventeur, 69, Avenue du Maine, PARIS

Figure 3b (opposite). Plaque Découpée Universelle, broadsheet (back), *c.* 1879, 650 × 500 mm.



UNITED STATES PATENT OFFICE.

JOSEPH A. DAVID, OF NEW YORK, N. Y.

IMPROVEMENT IN UNIVERSAL STENCIL-PLATES.

Specification forming part of Letters Patent No. **179,686**, dated July 11, 1876; application filed May 1, 1876.

To all whom it may concern:

Be it known that I, JOSEPH A. DAVID, of the city, county, and State of New York, have invented a new and Improved Universal Stencil Letter-Tracer, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a top view of my improved stencil letter-tracer, and Fig. 2 representations of a letter and figure traced thereby.

My invention relates to an improved stencil-plate, by which letters, numbers, and other characters may be traced in plain or ornamented style, to be used as a universal stencil-plate for sign-painters and others, and also as a toy for the instructive amusement of children.

The invention consists of a stencil-plate on which all the letters of the alphabet and numerals are so combined that any combination of them may be made. The stencil-plate is provided with space-sections at the sides, and top and bottom guide-pieces.

In the drawing, A represents a stencil plate, of any suitable material, that is cut out in such a manner that a combination of the letters of the alphabet and of the numerals from 0 to 9 is formed thereby.

The letters and numerals may be cut in any size or style, with shade-lines, or other ornamentation, as desired.

The stencil-plate has side strips or sections B, by which the space between letters or numerals is obtained. Top and bottom guides C, that are extended at the ends beyond the space strips or sections B, serve as guides for placing the plate into position for tracing the letters. Any letter or numeral may be traced with the stencil tracer.

The stencil-plate forms, with little practice, a cheap device for assisting sign-painters in tracing and spacing letters in a quick and convenient manner, producing them with absolute uniformity.

The plate may also be made of cheaper material, and employed as an instructive toy for children, teaching them to form words or numbers, by tracing the individual letters or numerals.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A universal stencil-plate having the letters of the alphabet and the numerals cut therein, and arranged in the manner described, and for the purpose set forth.

2. The universal stencil-plate above described, having side strips or sections for spacing the letters or numerals, substantially as described.

3. A universal stencil-plate provided with top and bottom guide-strips extending over the side space-strips, substantially as specified.

J. A. DAVID.

Witnesses:
PAUL GOEPEL,
T. B. MOSHER.

Figure 4a (right). Patent specification (text) of Joseph A. David, ‘Improvements in Universal Stencil-Plates’, US Letters Patent no. 179,686.

The Plaque Découpée Universelle was the invention of Joseph A. David. At present, little is known about him; in 1876, he was a resident of New York City, as stated in the US patent granted for his invention on 11 July that year[2] (figure 4, a–b). David had applied for the patent a little over two months earlier, on 1 May, and it may be no coincidence that only a week and a half later, on 10 May, the Centennial Exhibition opened in Philadelphia. If one were to speculate that David promoted his invention there, then a patent pending would no doubt have offered a welcome measure of commercial security.[3] In any case, David was mindful of patent protection and when in Paris two years later for the Exposition Universelle, he obtained a French patent and apparently several others as well.[4]

In the text of his US patent specification (figure 4a), David described his invention succinctly: ‘an improved stencil-plate, by which letters, numbers, and other characters may be traced in plain or ornamental style’. It would serve as a ‘cheap device for assisting

2. Joseph A. David (of New York, NY), ‘Improvement in Universal Stencil-Plates’, US Letters Patent no. 179,686, filed 1 May 1876, dated 11 July 1876; Class 33 (geometrical instruments), subclass 518 (masonry construction). The name of the invention in the patent title, ‘Universal Stencil-Plate’, was probably devised to conform to US Patent Office terminology. A variant name ‘Universal Stencil Letter-Tracer’ appears in David’s text specification, and may have been preferred by him.

3. As stated, David’s presence at the Centennial Exhibition is conjectural: research commissioned from the Historical Society of Pennsylvania, drawing on officially compiled reports, and indexes of exhibitors and awards, was unable to establish him as an exhibitor. David may have promoted his invention informally during the exhibition; and clearly at some point he came to official notice and thereafter included in the delegation of US exhibitors to Paris. The headline of David’s circular (‘grand succès de l’exposition Américaine’) probably refers to the US section of the Exposition Universelle.

4. French patent B.108785, 21 September 1878, ‘Plaque unique découpée, pour tracer tous les caractères de l’alphabet et les chiffres’, entered under classification heading no. 18 ‘Papeterie’, sub-heading no. 2: ‘Articles de bureau, presses à copier, reliure’; the actual patent entry is found in the addendum ‘Certificats d’addition’. The broadsheet states that patents were also obtained in the principal European countries (unnamed) and that the device was ‘registered’ in England. There does not appear to be a British patent.

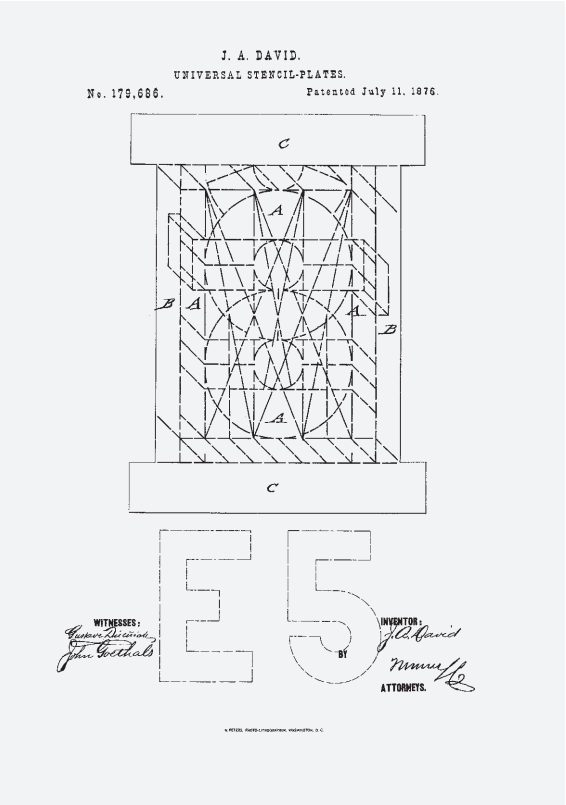


Figure 4b. Patent specification (drawings) of Joseph A. David, 'Improvements in Universal Stencil-Plates', US Letters Patent no. 179,686.

sign painters in tracing and spacing letters in a quick and convenient manner', or as an 'instructive toy for children, teaching them to form words or numbers, by tracing the individual letters or numerals.'[5] In addition to its scaffolding of guidelines, the plate had left and right 'space-strips' for establishing distances between characters, and top and bottom 'guide-strips' for aligning the plate laterally (figure 4b, 'B' and 'C' respectively). David did not specify the material from which the plate was to be made: a thin sheet of some metal is implied (copper, brass or tin plate, for example, metals typically used for stencils at the time) though David also states that the plate could be made of cheaper material – card perhaps – if produced as a toy.[6]

The characters shown in David's specification drawings are notable in several respects. Although sanserif in design and of a fixed size, David stated that they could (in theory) be provided in 'any size or style, with shade-lines, or other ornamentation, as desired'. The drawing of the plate does incorporate 'return' lines running up and left, and down and right, from which a three-dimensional and possibly shaded *trompe-l'oeil* effect might be created. But it is difficult to see how characters of any greater complexity (seriffed, for example) could be easily adapted to David's configuration. Its efficiency for generating all characters with 'absolute uniformity' or, as David expressed it differently, for combining them in a single stencil plate, seems nearly exclusive to simple sanserif forms. Nowhere does the patent text refer to the geometric basis on which the characters were to be constructed.

In its transition from patent to product, from Universal Stencil-Plate to Plaque Découpée Universelle, David's invention was more fully and decisively resolved. The return lines, for example, were

5. The notion of encouraging the not yet or only just literate to trace their letters as a way to knowing them, if not a provably universal idea, is one passed down the centuries in the West at least from Quintilian. 'Once the child has begun to trace the outlines [of letters], it will be useful to have these inscribed as neatly as possible on a tablet, so that the stilus is guided by the grooves. In this way, the child will not make mistakes as on wax (for he will be constrained by the edges on both sides, and will not be able to stray beyond the marks), and, by following these well-defined traces so quickly and often, he will strengthen his fingers, and not need the help of a guiding hand placed over his own.' *Institutio oratorio* [*The orator's education*], 1.1.27. Some translators have interpreted this not as a groove cut into a tablet but as a channel pierced through it, though the latter seems a misreading.

6. As noted above (n. 1), promotional items printed in Paris indicate that the Plaque Découpée Universelle was indeed first made of card and only later of metal.

excised; as manufactured, the device now allowed only for plain, two-dimensional characters. But these were supplemented by a variety of ornamental borders illustrated on the back of the broadsheet. David also introduced a much-expanded character set that included small letters, dipthongs, punctuation marks and various symbols. For characters too wide or tall to fit within the module of the guide, panels of instructions on the front of the broadsheet explained in French and Spanish how to shift the guide vertically or laterally to create them. These instructions also described the principles of character spacing and, using the specimen words 'EUROPE' and the trickier 'FAVEUR', illustrated how the configured guidelines could be exploited to space characters correctly.

Bolstering refinements to the invention as shown in the broadsheet were two testimonial texts extracted by David from French journals and reprinted in his advertising circular (see figure 2). The first was a 'news' item from *L'Exposition*, the second a letter sent to the editor of *L'Éducation*.[7] *L'Exposition*'s writer began with a graphic comparison: where 90,000 separate characters were needed to write Chinese, with the Plaque Découpée Universelle alone every character in every language derived from Greek and Latin could be made 'correctly and geometrically'. In just a few hours, an intelligent ten-year-old might learn to make a well-disposed poster. It was the duty of every teacher to possess the Plaque Découpée Universelle as it offered a comprehensive lesson in making letters and numerals. Among families, it would prove an amusing and instructive game.

The letter to *L'Éducation* picked up on these points and made several others as well. The Plaque Découpée Universelle was indeed so simple that in just a few minutes a child of ten could work it out; in a pupil's hands, it would be a source of endless amusement. So, too, the Plaque Découpée Universelle could be used to generate sets of letters with which to conduct reading lessons following the method common in nursery schools. These letters might also be used for composing and displaying adages of moral uplift, or for setting out historical sayings (*traits*) or rules of grammar. But *L'Éducation*'s correspondent also noted that the journalist Victor Nadal had, in a letter to Agénor Bardoux,[8] recommended the introduction of this 'marvellous little device' into every state school in France. The letter ended by enjoining enlightened and progressive teachers to adopt the Plaque Découpée Universelle without delay, as they would soon be convinced of its excellence.[9]

7. The first testimonial, signed 'E.S.', is apparently from *L'Exposition de Paris* (1878), a weekly journal of reviews and reportage edited by Adolphe Bitard and published in forty numbers over the duration of the Exposition Universelle by the Librairie Illustrée and Librairie M. Dreyfous. Various writers contributed, and while the text in David's circular matches the tenor of other items published in *L'Exposition*, there is no reference anywhere in the journal to the Plaque Découpée Universelle, nor does any writer use the initials 'E.S.'. It is possible that the testimonial was part of advertising matter wrapped around or inserted into *L'Exposition*, and which is now lost from the bound compilation consulted for the present essay. This might explain the lack of a specific text reference (journal number, date) in David's circular. The second testimonial is presumably from *L'Éducation*, subtitled 'revue pédagogique et bibliographique de l'enseignement religieux, intellectuel et social en France' and self-described as the 'organe libre des associations françaises des membres de l'enseignement'; it was published in Paris from 1873. According to David's circular, the letter, signed 'G.T.', appeared in the number for 26 October 1878, p. 676.

8. Minister of Education from 1877 to 1879 and, incidentally, great-great-grandfather of former French President Valéry Giscard d'Estaing.

9. Additional context may help situate these paragraphs. France at the end 1870s (that is, a decade into the Third Republic) was characterized by a positivist outlook running through many spheres of cultural and intellectual life, broadly expressed as faith in progress founded on advances in science and technology. The French defeat of 1870 at the hands of the Prussians, attributed by some to a perceived German superiority in education, lay behind vigorous educational reforms throughout this period. Between 1880 and 1882, for example, a series of new laws made primary education compulsory for all children between the ages of six and thirteen, with the state's provision to be non-sectarian and tuition-free. Moral and civic education replaced religious instruction and was joined by other mandatory subjects including French history and geography, basic science, economics and law, and various of the fine and industrial arts. At higher levels, there were initiatives to invigorate technical education, again spurred on by a perception of German superiority in this area. See Moody (1978: 87–104) and Mayeur & Reberioux (1984). See also Levin [1986] on the importance of geometry to French pedagogy at this time.

Whether or not these testimonials were unsolicited or rendered impartially, they demonstrate that the Plaque Découpée Universelle did garner favourable comment in places likely to attract the attention of potential purchasers or those who might recommend its use. On the evidence of David's circular, the pedagogical dimensions of the device were now foregrounded while its appeal to sign painters, suggested in the US patent specification, largely subsumed into the work and play of teaching and learning. Its advantages would thus be most fully enjoyed by novice letterers – French youngsters, in the first instance – for whom it would aid their many and varied lettering tasks. It remains to be discovered whether the device actually assumed any noticeable role in French schools or homes, or if instead it languished as an ingenious, and perhaps inscrutable, curiosity.

Universal by name, universal by . . .

If the Plaque Découpée Universelle, as presented in its promotional materials, offers insight into the device's immediate uses and hoped-for buyers, the ideas underlying the invention give scope for observations of a broader kind. As David first described it in his patent, the Universal Stencil-Plate was largely about the production of letters and numerals. It was 'universal' in a limited sense: that with a single device, any and all characters could be generated. Similarly, David's use of sanserif characters appears to stem entirely from their inexorable convenience to his geometric configuration. He certainly attached no special meaning to them or to their geometric form. The assertion is confirmed by David's statement – realistic or otherwise – that the invention could be configured for any style of letter. The concept was a wholly engineered one that, if it evidenced any ideological concern for form, only did so incidentally, as necessary to a universal mode of production.

This reading inevitably tempts comparisons between the invention and later experiments of the modernist avant-garde involving geometric sanserif alphabets[10] (figure 5, opposite). Correspondences between these alphabets of the 1920s and early 1930s and the Plaque Découpée Universelle are most obvious in a shared reliance on components systematically configured to an underlying geometric scheme. For both, the efficiency of engineering, real or imagined, was fundamental. But if for David this was implicit and matter-of-fact, for the modernists it was declaimed and exalted. For them, the engineer's functional and economical means dictated primary 'machine' forms that, when combined with proposals for single (-case) alphabets or reformed orthography, gave rise to parallel efficiencies in communication. While the modernist alphabets were, like David's, determined by geometry, the geometry served a higher purpose. The alphabets' primary forms, it was argued, transcended personality, locality and culture and, in articulating communications in ways that stood clear of linguistic idiosyncrasies, became universally meaningful.

10. Josef Albers, Herbert Bayer and Joost Schmidt created alphabets of this kind during tenures as Bauhaus students or teachers (or both); others did so elsewhere, in particular Jan Tschichold. See discussions in (e.g.) Kinross (2002: 233–45; and 2004: 111–14) and Burke (1998: 111–19); also Mills (1991). Bauhaus work is extensively illustrated in Brüning and others (1995), and Willberg (1969).

Figure 5. Sanserif alphabets constructed on a geometric basis.
(a) J. A. David, 1876/8, from the Plaque Découpée Universelle
(b) Herbert Bayer, *c.* 1925–8 later named 'Universal'
(c) Herbert Bayer, 1926 first published as 'Alfabet'
(d) Joost Schmidt, 1926 with construction diagram
(e) Josef Albers, 1923–6 named 'Schablonenschrift'
(f) Jan Tschichold, 1926–30, with phonetic variants for 'ch'

The comparison just attempted suggests that David's invention was conceptually circumscribed by its modernist successors. But this is not wholly true. Rather, in promoting the Plaque Découpée Universelle in Paris, David added appreciably to the conceptual dimensions of his patent. The invention now became multilingual, broadly accessible and pedagogically compelling. It was not, therefore, just mechanically astute, it was morally credible. Such claims, while not directly anticipating those of the modernists, seem similarly programmatic and universalist (if also commercially expedient). Less obviously, they position the Plaque Découpée Universelle as analogous to the Exposition Universelle itself, which, in the 'tradition' of world's fairs, was more than just a celebration of industrial ingenuity.[11] It was a conspectus of new technology, science and art; participating nations and cultures made it international and multilingual; mass education and enlightenment were aspired to, demonstrably so in didactic displays seen by large and socially diverse audiences; and though expansive, it was nevertheless compressed into one, highly ordered, 185-acre site straddling the Seine. While there is no evidence that anyone at the time linked these large-scale features with those of a single modest invention, the Plaque Découpée Universelle surely settled easily into the milieu of the Exposition Universelle. Judges and commentators indicated as much, sensing perhaps an *esprit de temps* resonant both with the exposition and with certain ambitions of the host country at the end of the 1870s.

At intervals since the fifteenth century, artists, designers, academics and intellectuals have to various ends synthesized letterforms from schemes of primary geometry, idealized proportions and rationalized construction. The results have often proved unsurprisingly similar, if not in form then in character: rigid and awkward, unconventional and yet highly rule-bound – obviously so where exceptions to the rules were unavoidable. Some forms from different eras do, however,

11. Greenhalgh (1988: 10–24) offers a concise review of the physical, spatial and conceptual tradition of international exhibitions beginning in London in 1851.

appear uncannily alike: those of the Plaque Découpée Universelle and several modernist alphabets show this to be true, while on closer inspection reveal the somewhat different aims driving their designs. If many such attempts can be derided as simplistic answers to subtle and complex matters of design, their lessons have since been of value where form is, by necessity, determined or expressed mechanistically: for characters recognized optically or magnetically, or for dot matrix or 'digital' characters used in liquid crystal and related mechanical or illuminated information displays. It is here that universal character matrixes of the kind invented by Joseph A. David have, in the recent past, resurfaced most convincingly.

References

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