

The Spartan Family

A B C D E F G H I J K L M N
O P Q R S T U V W X Y Z
abcdefghijklmnop
nopqrstuvwxyz

FIG. 1—Capitals and lower-case letters, in 36-point Spartan Heavy, are typical of the round, but not “fat” symmetry of this most distinguished of the modern, sans serif type families.

AMONG the modernisms in today's type practices, one of the most far-reaching began nearly thirty years ago in this country with the importation of European sans serif faces. Linotype Spartan is now widely recognized as the best among many designs, in this classification, that have subsequently been created or adapted by the various foundries and typesetting machine manufacturers.

Earlier periods in type founding had produced a copious variety of Gothics—types similarly “without serifs” but also conspicuously lacking in gracefulness of design. But the sans serif development in Europe came as a phase of the movement for free expression in the arts, an abandonment of period styles and fixed conventions which brought a demand for types in the contemporary spirit. Apparently any form of roman letter, that retained the essential degree of legibility, was too conservative. So the designers pruned off the serifs, reduced the contrast in the letter elements, and sought a geometrical flavor in their letter shapes.

While these “new” faces (they are strongly echoed in early Greek and Roman inscriptions hundreds of years back) might have been termed “re-designed Gothics” the “sans serif” designation carried more mer-

chandising values. It avoided the old-fashioned implications of a relationship to the ugly Gothics that filled every shop. When the first of the European foundry types were imported here, writers naturally adopted the sans serif term. The venerable Edmund Gress, then editor of the *AMERICAN PRINTER*, coined the single word “sanserif,” and an English designer used the one word “sans” to name his type “Gill Sans” (English Monotype face).

Our Spartan has been in process of development over a number of years. As always must be the case in these circumstances of matrix manufacture, the sales material for the successive additions to the family was scattered through the Linotype specimen books. When the family had grown to its present five weights and nearly thirty groups of two-letter and display, it became very difficult to keep in mind all these kinds and sizes. The S.D.B. listings are precise, but are lengthy and varied.

Of decided sales help, to simplify these complications, is the new complete specimen folder for the entire Spartan Family. It presents a clear picture of the members of the family, demonstrates some of their typographic uses, and clarifies the reference data. This unit

for the Sales Manual thus becomes a supplement to the specimen folder and it avoids duplication of the basic material therein. The origins of Spartan are significant, its design characteristics deserve some study and analysis, and the nature of competitive faces (notably by Intertype) must be understood by Linotype salesmen.

Origins of the Spartan Design

WHEN the rapid adoption of European sans serif types by aggressive American advertisers led to a demand for such faces on the Linotype, the preliminary approaches by Linotype's Typographic Development led to the creation of the Metro Family. This was the first face designed by W. A. Dwiggins. It found immediate acceptance for its style and legibility and it continues to be widely used. But, as discussed later, the basic design of Metro was more free and individual than that of the more rigid sans serif faces. Demand for such a machine face led to the studies that resulted in Spartan.

The material for the Spartan studies came through Linotype's relationships with German foundries. There, the Ludwig & Mayer foundry had produced Erbar, the first and some say the best of the European sans serif types. They granted permission to Linotype to reproduce Erbar for machine uses. At that time, however, the Metro Family was in full flower and being actively promoted. To avoid conflict Linotype then cut only the Erbar Condensed, recognizing the extraordinary value of the condensed design for newspaper head purposes. The immediate success of the Erbar Condensed, in its three weights, is familiar Linotype history.

Meantime the German foundry of Stempel, at Frankfurt-am-Main (Linotype affiliate which makes both foundry type and Linotype matrices for certain European countries), had designed their Grotesk, a sans serif in which Linotype had full rights for reproduction.

When, in due course after the launching of the Metro, it became desirable to bring out a new and more formal sans serif for the Linotype, the Erbar and the Grotesk designs were studied in detail. The best characteristics of each were blended and the result became Spartan (named with recognition of the obvious resemblance of this modern sans serif to early Greek inscriptions in stone).

The sheer logic of sound type design, which controlled the process of melding the Erbar and the Grotesk, brought forth in Spartan a face very closely resembling the German Futura, made by the German Bauer Foundry (and later adopted by license to Intertype). So close are the Spartan and the Futura that Spartan composition is often sold as "Futura" to buyers whose taste may have been shaped by the European origins of these types. It will be observed that the ascenders and descenders of Spartan are somewhat longer than those of Futura, a detail which softens the geo-

metric austerity of the letter in mass. The basic designs are almost identical, but the Linotype and Intertype cuttings vary in weights and combinations as detailed in Figs. 10 and 11. Design differences are noted in the discussions of Figs. 12-21.

When Spartan became firmly established in the sans serif market, an insistent demand arose for a full range of display sizes beyond the scope of the keyboard. On request, Linotype granted free permission to ATF to cut all weights and sizes up to 120 point, and the use of the copyrighted name. The ATF cuttings were made from drawings and technical data supplied by Linotype, which insured identical replicas in all weights and sizes of the machine faces. This cooperative arrangement was instituted by MLC Co purely as a service to industry by making available identical types for both hand and machine composition. This feature presents a strong selling argument in the customer's interest, and it should be stressed on every occasion. Spartan is available in foundry type in all weights and sizes up to 120 point.

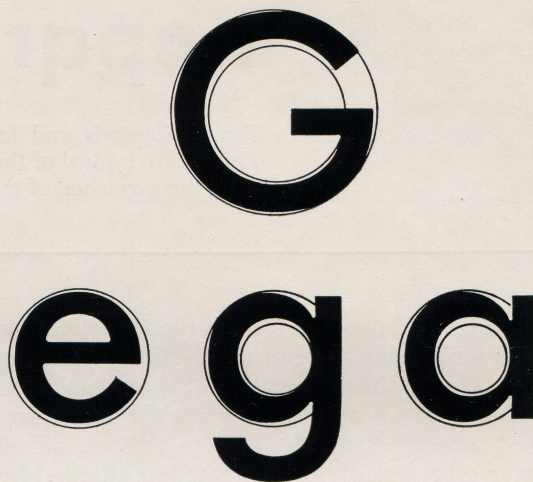


FIG. 2—Spartan round letters surrounded by true, compass-drawn circles to demonstrate that the so-called "geometrical" character of this sans serif design is tempered by subtle variations from rigid, mechanical contours.

Spartan's Characteristics of Design

WRITERS on type usage often refer to such sans serif faces as Spartan with the characterization "purely geometrical." They point to the straight, square elements, rigidly terminated, the symmetrical angles and apparently circular curves as the product of draftsman's tools: "T-square, compass and triangle." These general traits are true but, most important to type character are many subtleties which cannot be found if a draftsman executes a similar alphabet with his drawing instruments in a purely mechanical rendering.

In Fig. 2 are shown Spartan round letters surrounded by compass-drawn, true circles. Note how the letter shapes, which *appear* circular, actually vary from the mechanically rigid circles. That variation is a *vital* trait in the design, a source of its life and character.

Look at the roman cap G's in Fig. 7, where they are about 48-point in size. They *seem* to be true circles in contour. But Fig. 2 shows how the actual shapes depart from the compass-drawn lines that surround them. This is a graphic demonstration of a basic principle in type design. If we made a similar test, placing true circles around the "round" capitals of all good type faces, we would find each design made with its own variations from the circle. In a monotone face like the Spartan, made largely with one width of stroke for its elements, this condition is less marked than in a face of contrasting elements such as Electra for instance.

Spartan versus Metro

WHEN Dwiggins developed the Metro design, it was mutually agreed that the letter forms might preserve some of the calligraphic characteristics of a typical roman face. It was felt that the more rigid sans serif types, then being introduced, lost legibility with their formality. These traits in the Metro are shown in some of the letters in Fig. 3, which compares 36-point Spartan Medium with 36-point Metrolite No. 2. In this size the Metro is about 11% more extended in alphabet length than the Spartan and this generous width of the Metro contrasts with the more compact quality of the Spartan. This contrast of shapes holds throughout the two type

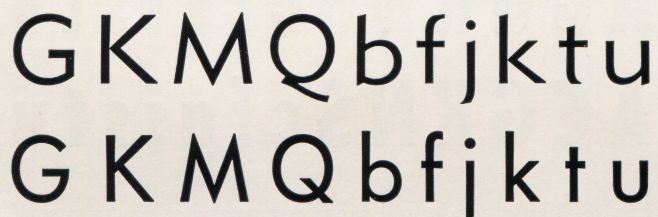


FIG. 3—Design characteristics of the Metro Family compared with the Spartan. These lines are in 36-point Metrolite No. 2 and 36-point Spartan Medium.

families and it makes the Metro more readable (in this writer's judgment) when used for lengthy masses of body type, which is a less frequent use of sans serif type.

In the handling of basic shapes, we note that Spartan G swings with a circular movement into its horizontal arm. But Metro G, like the roman faces, carries a short vertical element up to the horizontal.

The K in Metro brings the two angular stems to a point, whereas the upper stem, in the Spartan, takes off

with a firm intersection. The cap M is treated identically in each design but their character differs with the contrasts in set width.

The Q in the Metro holds some semblance to the swash tail of a roman, while the treatment of the Spartan Q is definitely mechanical.

The lower-case letters are more pronounced in their design differences than the caps of these two families. Note how the ascenders in the Metro are diagonally clipped at the top with a slightly concave cut, while the Spartan ascenders maintain a right-angle terminal.

In the b, f, and j the influence of the roman is particularly apparent in the Metro. The b retains a spurred beak at the base of its vertical stem—Spartan again comes down squarely to the line. The Metro f, j, and t have marked roman traits as against the simpler Spartan.

The lower-case k's each echo their cap designs.

The Metro lower-case u contrasts with the Spartan, which is a small cap treatment.

These contrasts in design give us two distinctly different sans serif type families. A buyer's discrimination in selecting between them will be based on:

1. Personal preference—and either Metro or Spartan is in good current usage, though the Spartan is the more modern.
2. The desires of his customers—they usually want the newer faces.
3. The nature of his work—Spartan's five weights and many two-letter combinations cover a multitude of typographic needs.

Spartan Compared with Gothics

TO THE CASUAL observer who lacks type sensitivity most of the sans serifs and the conventional Gothics look pretty much alike. But we make types and merchandise them for a market whose discriminating buyers are often keenly sensitive to the niceties of type design. In that spirit let's compare a few Spartan letters with some typical Gothics.

Compared with Gothic 16 the Spartan Black has a superficial resemblance, with "color" and set width about the same. But note in Fig. 4 how the characters differ in detail.

In the cap C the Spartan circles are cut vertically with a crisp quality that is lacking in the Gothic.

The Spartan E has more pleasing proportions.

Spartan's G is markedly more simple—the Gothic G loses crispness with a bracketed horizontal arm *plus* the clumsy spur which further complicates its form. Virtually all the Gothics have that same conflicting vertical element at the lower right of G.

In the Spartan M, the slight sloping of the outer stems provides better design at their juncture with the

inner V of this letter. Note how heavy and unduly black the Gothic 16 M unavoidably becomes with the vertical placing of these elements. This blemish is also true of other Gothics. Dwiggin avoided it in the Metro by the use of sloping stems as in the Spartan.

The cap Q's differ completely. As in the other round capitals (C D G and O) the Gothic 16 outer shape is distinctly oval and this group of letters is correspondingly narrower, with pinched-up bowls. In the Spartan the circular formula for design widens and opens these letters. Yet the alphabet lengths are about the same in both faces because other Spartan letters are comparatively more slender and graceful.

Note the traditional roman form of the g in Gothic 16. By using the calligraphic form in the Spartan, the

CEGMQgkty
CEGMQgkty

FIG. 4—Comparing a traditional Gothic, in its more labored design, with the modern qualities of the sans serif. These lines are in 36-point Gothic 16 and 36-point Spartan Black.

designer retained the basic circular quality and a simplicity which is much more in harmony with the general design.

The comparative structure of the lower-case k's shows again the value of simplicity. In Gothic 16 the upper diagonal stroke meets the vertical stem independently, with the lower diagonal taking off at a rather constricted angle. Within the same set width the Spartan k achieves a more vigorous angle and a more consistent shape.

The t in Spartan becomes the simplest possible expression of this letter form, with its two crossed strokes, each with square terminals. Most of the Gothics, at least in their larger sizes, have a curved terminal at the base of the t, as Dwiggin handled it in the Metro for a bit more legibility. In the Gothic 16 this letter is decidedly ugly in form.

With Gothic No. 38. Typical of the many Gothics that have been the workhorses of job printing and heavy display advertising during the past century or more is the Gothic 38, shown in Fig. 5. It is compared with the same 24-point size of Spartan Heavy. This Gothic is one of the older Linotype faces and is not currently listed in the S.D.B. But it well exemplifies the differences in design that make for the modern spirit of the Spartan.

BEGKRSadstwy
BEGKRSadstwy

FIG. 5—A more extended version of the "work horse" Gothics, a line of 24-point Gothic 38, looks distorted and wholly without style as compared with 24-point Spartan Heavy.

The extended nature of the Gothic 38, so apparent in the caps, as compared with the graceful shapes of the same Spartan letters, demonstrates the whole philosophy of those generations of type carpenters (not true designers) who produced the "job faces" of the 19th century. Distortion of our basic roman alphabet may have produced type novelty but it has no other saleable virtues.

With Condensed Faces. In Fig. 6, a line of 36-point Gothic 13 (center) is compared, above, with 34-point Erbar Bold Condensed (the nearest available size) and, below, with 36-point Spartan Black Condensed. We have previously noted the Erbar Family as one of the direct ancestors of the Spartan.

In general, the squeezing together of letter forms to make condensed type diminishes their distinctive

ACGKNSc f g j s t u
ACGKNSc f g j s t u
ACGKNSc f g j s t u

FIG. 6—Three condensed faces compare modern sans serif designs, top and bottom, with a familiar Gothic. Top line is 34-point Erbar Bold Condensed. Center line is 36-point Gothic 13, and the bottom line is 36-point Spartan Black Condensed.

character. That is apparent in these three lines. If the reader wants further proof turn the pages of the "Specimen Alphabets" in the One-Line Specimen Book and note how the condensed versions lose distinction in design as compared with the full forms of Bodoni Bold, Century Bold, and Caslon Bold. Then study the several condensed Gothics on these pages. This loss of comparative identity when types are condensed explains why so few good head-letter faces exist compared to the much wider variety in good body types.

In the Gothic 13 we note some of the mannerisms that were stressed in the Gothic 16—the clumsy joining of the strokes of the A, the over-drawn C, the complicated G and K, the ponderous quality of the S.

The lower-case of Gothic 13 naturally repeats the feeling of the caps, and with equal complications.

Among these three faces the Spartan Condensed is the simplest in design. But, to this writer's taste, the Erbar is a bit more readable through its more positive echoes of the familiar traits of our basic roman alphabet. The Erbar j and t illustrate this point.

If a sales situation indicates the supplying of a condensed sans serif for primary uses in *display advertising*, then the Spartan is by all means the offering. But if the problem is a *head-dress*, then Erbar may be preferable.

Having noted these differences in design which make the Spartan so distinct from the various Gothics, let us compare the several members that comprise the extensive Spartan Family itself.

Preserving Design Character of the Spartan Through Five Weights

THE SPECIMEN folder for Spartan emphasizes and demonstrates the extraordinary variety in the typographic effects which become possible with the five weights in this family. No need to repeat that sales material here, but it is of interest to see how this big manufacturing program has been integrated in design, making such variety in weights and so many two-letter combinations available for so many printing needs.

In Fig. 7, typical capital and lower-case letters have been arranged in columns which help us compare the design procedure in building the five weights. This illustration is a zinc etching from proofs of the letter-patterns, made thus for the advantage in studying a larger size than is available beyond the Linotype Spartan limits of 36 point.

If manufacturing facility were permitted to dictate the designing of a type family like this, the set widths would be held exactly equal down through all the various weights, at least to the Spartan Black which obviously must be somewhat wider to maintain the uniformity of style. But the set widths have been adapted with the first consideration for true design. This picture is summarized on page 196 of the One-Line book, with the tabulation of alphabet lengths.

Comparing these data for, say, the 12-point sizes of the faces as shown in Fig. 7, we find:

	Alphabet Length
12-pt. Spartan Light	138 pts.
12-pt. Spartan Book	149 pts.
12-pt. Spartan Medium with Italic ..	138 pts.
12-pt. Spartan Medium with Heavy .	151 pts.
12-pt. Spartan Heavy with Italic	151 pts.
12-pt. Spartan Black	172 pts.

Excluding the wider Spartan Black (172 points), there is a range of lengths in these 12-point sizes including 138–149–151 points in the other four weights. These required adaptations of letter-drawings, *not* merely the variation of side-bearing and fitting on various characters. Further comment on this phase of Spartan comes with the later discussion of two-letter combinations.

As our eyes travel up and down the columns of Fig. 7, comparing in detail the weight-building process as the letters are made heavier, we are impressed with the many considerations which are imposed upon the designer. The heights and the *apparent* widths must be maintained. The height is an absolute specification—otherwise alignment would be lost. But the widths, as noted above, will vary subtly in many instances, for appearance. That factor, not to be measured with scales or instruments, involves the experience and judgment of the designer and his collaborating executives.

We have earlier observed the relationship of the round Spartan letters to a true circle, noting the minute departures from the geometrical which give character. Scanning the row of G's, it is apparent that the slope of the italic design demands an echoing slope in the round contour of the circular letters. When a circle is thus tipped it becomes an oval, not a circle, and for italic harmony the axis of this oval must be given the angle of slope of the *E*, *I*, etc. Note that the terminal of the horizontal arm of the *G*'s is sheared at that same angle.

Going down the column of M's, we find what seems to be an inconsistency in the treatment of their upper terminals. They are pointed in the Light and Medium weights but are sheared off square in the other three weights. Since the square-cut terminals seem harmonious and are consistent with the Erbar and Grotesk origins of the Spartan, we must assume that this is an "accidental." It doesn't harm the type even though we find no reason for it.

Scanning the column of R's, note how the bowl shrinks progressively as the weight increases. Its curved portion holds the circular theme and is not permitted to shrink into a pinched oval form, as in some of the Gothics. The tail of the R takes off, just away from the stem in the three lighter weights. Then it is joined into the stem in the two heavier weights—but with no loss of consistency in design.

The lower-case a is shown here in the round "Greek" form. But it is also furnished, when alternately specified, in the roman or conventional design, like the a in this Caledonia you are reading.

The a, as shown in Fig. 7, was also used in Fig. 2 to show how the compass-drawn circle *guides* but does not *control* the shape of the letter. Note how the inner contour of the bowl of the a holds the appearance of a true circle (except in the oval-bowled italics) even though Fig. 2 demonstrates the departure from a geometrical shape.

Comparing the Five Weights of the Spartan Design



FIG. 7—Typical letter forms in the five weights of the Spartan Family, reproduced from their matrix patterns in approximately 48-point size, permit study of their details. The fine marks just below the Heavy Italic compare the set widths of that face with the set widths of the Black Italic in the line below. The set widths are fairly constant for the lighter weights, as compared with the added width needed to preserve the family traits in design for the Spartan Black.

The column of d's shows similar considerations for the successive additions of weight. In each weight, the d and the a are identical if the stem of the d were sheared off at the mean-line of the lower-case.

The lower-case e's evidently presented no design problem in adding weights, except in the Black. There the terminal of its circular element was cut horizontally against the diagonal shearing of the other weights. This

Comparing the Four Weights Made in Spartan Condensed Faces



FIG. 8—The same letters reproduced in Fig. 7 illustrate the transition in weights without substantial change in set widths of the Condensed members of the Spartan Family.

was apparently to avoid an abruptly cut-off effect which might be emphatic in the Heavy were it treated like the others.

For the several g's we have noted the advantage in the calligraphic form as compared with the roman g. No changes in basic design have been needed for the progression of weights.

In the lower-case n the gradual additions of weight compel an alteration in the contour of the arc (or "arch" as some call it). As the weights grow inward progressively, the contour becomes narrower, with correspondingly quickly-rounded arc. Yet the harmony of the design is maintained.

With the lower-case r the design problem was somewhat similar to that of the n, except that the general shape of the right arm of the r must be carefully preserved.

Going back to Fig. 1, and in the comparisons made in Figs. 12-21, if we make similar studies of the full alphabets of all five weights of the Spartan, we shall find the same careful considerations for consistent design, ingeniously applied to hold family harmony.

A detail of the accessories of figures and points (for which the specimen folder provides ample study)—the opening and closing quotation marks (" and ") are now furnished in all sizes and weights, *when so specified*, in place of the single quotes (') that were shown earlier.

Design Characteristics Condensed

THE CONDENSING procedure for the four weights of Spartan has been illustrated in Fig. 8, with the same letters that comprise Fig. 7.

The overall formula for condensing the full circular effect of Spartan reduces the outer circle to a rather full oval. Then the other letter shapes are correspondingly compressed throughout the alphabet.

We need only to compare Figs. 7 and 8, in detail, to realize how the condensed designs are developed. Item by item, elements, curves, intersections, and terminal treatments must be in harmony with the parent design. Careful study and comparison of the two illustrations and of Figs. 20 and 21 shows how well these conditions have been met.

Ramifications of the Spartan Family

SALES CONVENIENCE, in dealing with the many possibilities for sales of Spartan, calls for a visual index of the weights and size ranges in this biggest of all Linotype families, together with the availability of italics. The specimen folder makes a good presentation of this information, but Fig. 9 gives the story in both its positive and its negative aspects. We might not want to say "NO" to our customers quite as bluntly as does this confidential table, but the Linotype salesman must know the limitations as well as the resources of his merchandise.

Note that Fig. 9 shows what *sizes* and what *styles* are currently available. Thus, if a customer needs a series of the Heavy Condensed, for instance, we observe that its size range is 6 to 36 point. We also note that no com-

panion italic is available in this member of the family. If we now check the E Section in the S.D.B. for the various combinations with the Heavy Condensed, we find:

In 6 to 14 pt., Book Condensed with Heavy Condensed.

In 18 and 24 pt., Heavy Condensed with Book Condensed.

In 30 and 36 pt., one-letter Heavy Condensed.

Thus the summary in Fig. 9 becomes a first checking point for availability of a desired weight and size. Then we turn to the S.D.B. or the specimen folder to ascertain what two-letter combinations and one-letter display sizes are made in that face. What may constitute the competitive situation is tabulated in Fig. 10.

The Faces and Sizes Currently Made in the Spartan Family

FIG. 9—This table shows only the range of sizes now available in each face. For their combinations as made in two-letter matrices see the listing which compares them with Intertype Futura.

ROMAN	ITALIC	CONDENSED	COND. ITALIC
Spartan LIGHT 6-24 PT.	NO	NO	NO
Spartan BOOK 6-24 PT.	Book ITALIC 6-24 PT.	Book CONDENSED 6-36 PT. (5-PT. DUPLICATE)	NO
Spartan MEDIUM 6-36 PT. (6-PT. DUPLICATE)	Medium ITALIC 6-36 PT.	Medium CONDENSED 8-24 PT.	NO
Spartan HEAVY 6-36 PT. (8-9-10-PT. DUPLICATE)	Heavy ITALIC 6-36 PT.	Heavy CONDENSED 6-36 PT.	NO
Spartan BLACK 6-36 PT.	Black ITALIC 6-36 PT.	Black CONDENSED 8-36 PT.	Black Cond. ITAL. 8-36 PT.

Machine Faces that Compete with the Spartan Family

Fig. 10—Showing sizes and ranges currently offered, arranged by weights approximately equal. Linotype and Intertype are usually duplexed with italic and oblique in 6 through 24 point. Other combinations are shown in Fig. 11.

LINOTYPE	INTERTYPE	LUDLOW	MONOTYPE
Spartan Light 6-24 (No Italic)	Futura Light 6-14 (Oblique 6-14)	Tempo Light 6-72 (Italic 10-72)	20th Century Light 6-72 (Italic 6-72)
Spartan Book 6-24 (Italic 6-24)	Futura Book 6-14 (Oblique 6-14)	---	---
Spartan Medium 6-36 (Italic 6-36)	Futura Medium 6-30 (Oblique 6-30)	Tempo Medium 6-72 (Italic 8-48)	20th Century Medium 6-72 (Italic 6-72)
Spartan Heavy 6-36 (Italic 6-36)	Futura Demibold 6-30 (Oblique 6-30)	Tempo Bold 6-72 (Italic 12-48)	20th Century Bold 6-72 (Italic 6-72)
Spartan Black 6-36 (Italic 6-36)	Futura Bold 6-36 (Oblique 6-30)	Tempo Heavy 6-72 (Italic 12-72)	20th Century Extrabold 6-72 (Italic 6-72)
---	---	Tempo Black 18-72 (No Italic)	20th Century Ultrabold 8-72 (No Italic)
Spartan Book Condensed 6-36 (No Italic)	---	---	---
Spartan Medium Condensed 8-24 (No Italic)	Futura Medium Condensed 6-30 (No Oblique)	Tempo Medium Cond. 30-96 (No Italic)	20th Cent. Medium Cond. 10-72 (No Italic)
Spartan Heavy Condensed 6-36 (No Italic)	---	Tempo Bold Condensed 6-96 (No Italic)	---
Spartan Black Condensed 8-36 (Italic 8-36)	Futura Bold Condensed 6-36 (No Oblique)	Tempo Heavy Condensed 10-96 (Italic 14-72)	20th Cent. Extrabold Cond. 8-84 (Italic 8-84)
---	---	---	20th Cent. Ultrabold Cond. 8-72 (No Italic)

Machine Faces that Compete with Spartan

THE SANS SERIF era in typography stirred all the manufacturers to an outburst of offerings so numerous and varied that the trade has been increasingly confused as to the names and relative significance of the many new faces thus manufactured.

In Fig. 10 are tabulated the Intertype, Ludlow, and Monotype faces which most closely resemble our Linotype Spartan. This table has been compiled for its obvious usefulness in dealing with competitive problems. The lists are arranged to read across horizontally with similar weights in the same line, where available. A row of hyphens means no matching weight by that manufacturer.

The listings show that the four columns are by no means parallel in all details. Linotype has *nine* major groups, by weights and in condensed styles. Intertype has seven, while Ludlow and Monotype have eight each.

In Fig. 10, Spartan *Heavy* is listed with the same weight as Futura *Demibold*, Tempo *Black*, and 20th Century *Bold*.

Against the Spartan *Black* weight, the others are *Bold*, *Heavy*, and *Extrabold*, respectively.

The Ludlow *Black* and Monotype *Ultrabold* are heavier and blacker than any of the Linotype or Intertype faces.

All the four competing families make similar use of the terms *Light* and *Medium*. The confusion of the other terms certainly justifies the various trade movements, in recent years, to attempt to persuade the manufacturers to adopt a uniform nomenclature. But the committees of printers and typographers who have tried to shape up a governing policy usually go on to insist that type specimen books as well as the actual type faces themselves and their names must be *all* identical. We can only observe, when a customer thus remonstrates, that the current condition obviously results from the traditional competition that typifies American business. Presumably a totalitarian, planned economy would employ a Commissar of Typography who would simplify these matters, regardless of the millions of matrices involved and the millions of dollars now invested in type specimen books, folders and broadsides!

There are various important phases to the competitive factors in these four type families, with the immediate Linotype vs. Intertype details discussed later. The Fig. 10 groupings show the absence of certain equivalent faces across the columns. Intertype has nothing to match our Spartan Book Condensed and Heavy Condensed. Their size ranges are more limited and they have *no* Oblique to match our italics in the Black Condensed. While they show a present advantage in an Oblique for their Light weight, this condition can be met by Linotype in the future should a real demand develop for it.

The Ludlow Tempo family provides display resources, in a range above the keyboard sizes of Spartan, *below* which Ludlow constitutes competition. For head requirements and for display, especially in the Food Store category, we find that the bigger sizes of Tempo will be necessary. Then it often happens that the smaller sizes, 36-point and under, will also have been purchased. In that general scheme of equipment we frequently find a Linotype sales opportunity, for the volume of composition by hand with the "keyboard sizes" of Ludlow often becomes such as to provide strong arguments for additional Linotype equipment to handle it. The 18- to 36-point sizes of Ludlow (and occasionally the same condition with Monotype 20th Century) are a set-up for Wide Range Linotypes.

On the big heads and the big faces in display advertising the battle rages between Ludlow and Monotype, with Ludlow today in the larger number of plants. With either equipment, however, there comes a natural invitation for a careful survey of numbers of lines thus set which might logically and more economically be handled by Linotype.

In the question of design details among these four competing type families, there are some differences. But we may safely assert, without risk of being accused of "sales exaggeration," that Spartan fully meets virtually any typographic need for which the basic sans serif may be specified. The one exception (and that will be infrequent) covers the very heavy Ludlow Tempo Black, and the 20th Century Ultrabold and Ultrabold Condensed.

The ATF Spartan is more of a sales aid to Linotype than an element of competition. The plant which has a series of Spartan in Linotype matrices can use small fonts of foundry Spartan for additional size or weight requirements that might not justify immediate purchase of more matrices. Such uses tend to build up further matrix purchases as the type family grows in production uses.

Two-Letter Combinations of Spartan Compared with Intertype Futura

THE IMMEDIATE competition in selling Spartan often involves the Intertype Futura. Among the plants serving type-conscious buyers the name "Futura" may carry a preference growing out of the original Bauer Futura's design standing. Intertype uses the name by permission. Then our first approach to such cases is to demonstrate the close identity in design of our Spartan and its wider adaptability to many printing needs, with its wider range of sizes and two-letter combinations.

If the two families were made with the same combinations the selling routine might be simpler. But the differences, which are mostly to Linotype's advantage, make it essential to know how the 28 Spartan groups in the current S.D.B. listings check against the Intertype

Two-Letter Combinations in the Spartan Family

Compared with Intertype Futura

Spartan Light

with Medium: 6-8-9-10-12-14-18-24

Futura Light

with Oblique: 6-8-10-12-14

Spartan Book

with Ital. and SM. CAPS: 6-8-9-10-11-12-14-18-24

with Heavy: 6-8-9-10-11-12-14

in auxiliary position with Heavy: 18-24

Futura Book

with Oblique: 6-8-9-10-12-14

.....

.....

Spartan Medium

with Italic: 6-8-9-10-12-14-18-24

with Heavy: 6-8-9-10-12-14

Futura Medium

with Oblique: 6-8-9-10-11-12-14-18-24

with Demibold: 6-8-9-10-11-12-14

Spartan Heavy

with Italic: 6-8-9-10-12-14-18-24

with Book: 18-24

in auxiliary position with Book: 6-8-9-10-11-12-14

with Medium: 18-24

in auxiliary position with Medium: 6-8-9-10-12-14

Futura Demibold

with Oblique: 6-8-9-10-11-12-14-18-24

.....

.....

.....

.....

Spartan Black

with Italic: 6-8-9-10-12-14-18-24

Futura Bold

with Oblique: 6-8-9-10-11-12-14-18-24

Condensed Faces

Spartan Book Condensed

with Heavy Condensed: 6-8-10-12-14

in auxiliary position with Heavy Condensed: 18-24

.....

.....

.....

Spartan Medium Condensed

with Black Condensed: 8-10-12-14

in auxiliary position with Black Condensed: 18-24

Futura Medium Condensed

in auxiliary position with Bold Cond.: 6-8-10-12

Med. Cd. No. 2 in aux. pos. w. Bold Cd.: 14-18-24

Spartan Heavy Condensed

with Book Condensed: 18-24

in aux. position with Book Cond.: 6-8-10-12-14

.....

.....

.....

Spartan Black Condensed

with Italic: 8-10-12-14-18-24

with Medium Condensed: 18-24

with 14-pt. Heavy: 18

with 18-pt. Heavy: 24

Futura Bold Condensed

with Medium Condensed: 6-8-10-12

with Medium Condensed No. 2: 14-18-24

.....

.....

Duplicate and Dual Alignment Faces

Spartan Duplicate

in Spartan Medium: 6
 in Spartan Book Condensed: 5
 in Spartan Heavy: 8-9-10

Intertype offers VOGUE, not a close match for their Futura, in Dual Alignment matrices (same as Linotype Duplicate matrices)

in Vogue Bold: 6-8-10
 in Vogue Bold Condensed: 8-10

offerings. The comparative size ranges, in each face, have been tabulated in Fig. 10. For better understanding, a separate tabulation of the two-letter combinations becomes Fig. 11.

Cross-checking down the listings in Fig. 11, we are first impressed with the blank spaces in the Intertype column. Then we note the better size ranges offering useful two-letter display in some of the Spartan. In Fig. 10 there was a similar Linotype advantage shown in the overall size ranges and variety of Spartan.

Note particularly that Futura, in the full-width groups, has only *one* two-letter combination of two weights of the roman: the Futura Medium with the Demibold. Their answer to this criticism might point out the advantage of the use of mixers to gain both contrast of weight, *plus* the italics, when running two fonts. But we know that many plants want the typographic facility of a roman-and-bold combination on one two-letter matrix—and for those needs Spartan offers *three* different combinations:

Spartan Light with Medium 6 through 24 pt.

Spartan Book with Heavy 6 through 14 pt.
 (positions reversed in 18 and 24 point)

Spartan Medium with Heavy 6 through 24 pt.
 (positions reversed in 18 and 24 point)

In the condensed versions Spartan has a similar superiority and sales advantage. It has four weights, while Futura has only two. In the Spartan Black Condensed the 36-point size rounds out a better variety, for a head scheme, than the 30-point top sizes of the Futura.

The Futura Condensed has no Oblique, in either weight. But Spartan Black Condensed, with its Italic plus its 36-point top size, becomes an excellent and versatile head-letter face.

For head purposes there is also special merit in Spartan's 18-point Black Condensed duplexed with 14-point Heavy. The same combination of 24-point Black Condensed with 18-point Heavy provides a variety of smaller heads, from 14-point through 24-point, with two fonts. This is a Linotype *exclusive*—it might well swing a sale.

Spartan Duplicate has no direct competing face in the Futura Family. The Intertype One-Line book features Vogue, as listed here in Fig. 11. This is not an exact match for Futura, nor are the Vogue sizes so comprehensive as those of Spartan Duplicate. They lack 5 and 9 point, sizes which make the Spartan decidedly more flexible.

Regular Spartan Has Special Body Sizes

WHEN the Spartan Design was developed for Linotype, the immediate objective was to maintain an exact duplication of the subtle qualities of the Erbar and Grotesk European foundry faces. Thus the various weights of the regular Spartan preserve the letter sizes of the originals, each body-size being perceptibly smaller than such standard-sized faces as Memphis or Caledonia.

As a result of this facsimile reproduction, the Spartan specimen folder carries a notation against all the 9-point sizes of the regular Spartan faces showing "8-point alignment."

When the Spartan Condensed faces were considered as a problem of fresh design, it became apparent

that they would be most used in combination with news and book faces of standard dimensions. Thus the letter heights of these condensed faces were established accordingly and, size for size, the Condensed Spartan is somewhat larger on the body than the regular Spartan.

These differences *prevent* the use of the regular and condensed faces in the same line since they will be perceptibly and objectionably out of alignment. Such a combination would rarely be desired typographically but this non-mixing factor becomes a sales condition to be remembered. Customers planning a Spartan installation must be duly informed of this limitation, otherwise future complications are probable.

ABCDEFGHIJKLMNOPQRSTUVWXYZ &
 ABCDEFGHIJKLMNOPQRSTUVWXYZ &
 abcdefghijklmnopqrstuvwxyz
 abcdefghijklmnopqrstuvwxyz

FIG. 12—The upper alphabets of 14-point Spartan Light compared with 14-point Futura Light (lower). This is the largest size in the Intertype face.

Letter-by-Letter Comparisons with Futura

GENERAL comparisons between the Spartan and Intertype Futura designs, made in the preceding comments, can be observed in the type specimen books. But competitive conditions found in the field often make it essential to enjoy the advantage of a detailed knowledge that can come only by close study of the two type families. For this purpose specimen settings of members of the Futura Family were procured from a trade plant and comparable lines of Spartan were set. These letter-by-letter comparisons appear in Figs. 12–21.

Spartan Light, with an alphabet length of 158 points, is shown in Fig. 12 against **Futura Light**. The latter stops at 14 point (while the Linotype face goes to 24 point) and the comparative lines are less apparent in their differences in this size. But the Futura Light, with seven points less of alphabet length, reveals that factor in the less graceful, somewhat squeezed design of cer-

tain letters. This is true of the Futura Light caps A, D, E, F, J, K, L, P, R, V, X, and &. In the Futura lower-case this quality marks the f, h, k, n, r, t, u, x, y, and z.

Their saving of seven points on alphabet length is no sales factor, for the slight difference in copyfitting gain has no particular merit for a face which is not primarily a body type. Whereas the loss in quality of design certainly militates against the Futura.

Notably in such letters as cap P and J does the squeezed character of Futura design show its deficiencies.

Among the lower-case letters, the Futura f is notably hurt by its narrow set width. The k is tight and too compact in the intersection of its diagonal arms. The m is poorly proportioned in the width of its two counters. The r lacks grace in its arm. The t suffers with restricted width, and the u looks similarly tight in form.

The advertising typographers, always outstanding among the type connoisseurs, were quick to sense these differences between the Linotype and Intertype faces.

ABCDEF GHIJKLMN OPQRST UVWXYZ &
ABCDEF GHIJKLMN OPQRST UVWXYZ &
 abcdefghijklmnopqr stuvwxyz
 abcdefghijklmnopqr stuvwxyz

FIG. 13—Upper lines in 14-point Spartan Book compared with 14-point Futura Book (lower), the largest size in the Intertype face.

With the 14-point **Spartan Book**, as against the **Futura Book**, our designers added eight points of alphabet length to preserve the style of the letter, while Intertype added only three points beyond the Light weight. Thus Spartan Book measures 166 points against Futura Book's 154 points. And the restricted letter forms in the Futura are even more apparent in this Book weight than in the Light.

Note the Futura caps A, B, C, D, E, F, J, K, L, M, P, R, X, and Y. Each suffers by comparison with the Spartan design, whose more open quality has a more consistent style. One wonders if the Futura Family had the same careful study for exact relationship of its members that was given to the Spartan.

Such letters as the Futura B, P, and R seem "starved" in the tighter bowls.

In the lower-case, the constricted feeling pervades almost the entire alphabet of the Futura. These two 14-point comparisons should preferably be studied under a glass since the details thus explained reveal the causes of deficiencies in design.

The slightly heavier weight of the Futura Book, with the 12 points difference in alphabet length (almost half a point to a letter on the average), has crowded the counters of the lower-case even more noticeably than in the caps. Thus the lower-case looks about one point smaller, relatively, against the Spartan Book, or even against their own Futura Light. This effect is accentuated by the shorter descenders of the Futura design.

For the studies of the remaining members of these two type families, 24 point became the common size and the traits of design are more readily observed.

ABCDEFGHIJKLMNOPQRSTUVWXYZ&
 ABCDEFGHIJKLMNOPQRSTUVWXYZ&
 abcdefghijklmnopqrstuvwxyz
 abcdefghijklmnopqrstuvwxyz

FIG. 14—Upper lines in 24-point Spartan Medium compared with 24-point Futura Medium.

Comparing **Spartan Medium** with **Futura Medium**, in Fig. 14, we find the latter to be 13 points the shorter in the lower-case alphabet. Since this gives the Futura no advantage in the running of these matrices versus the Spartan, we can only believe that the full character of a well-balanced sans serif type escaped the concept of the Futura designers.

Here again, as in the Futura Book, their weight for the Medium slightly exceeds that of the comparable Spartan Medium. Look again at Fig. 7 and note the harmonious relationship between the five weights of the Spartan Family—a basic factor that was very carefully determined by the Linotype designers, and presumably seemed less important to the producers of the Futura. When a type family has the unusual feature of five weights among its members the planning, both of weights of the letter elements and of the relative alphabet lengths, becomes a prime essential.

Returning to Fig. 14, let's apply a method of comparison that is often used by designers in various fields. Turn the page, top to bottom, and study the type characters upside down. This lessens their insistence on their identity as letter forms and tends to emphasize the distinctions between the adjacent lines of the Linotype and Intertype faces. A good magnifier, less essential than for the 14-point specimens, will still be helpful for these 24-point studies.

Among the caps, note how the restricted width of the Futura A is reversed in the design of the W. This is over-wide and sprawls out—but again look at the Futura M against the Spartan M. The Futura J has a narrow fish-hook appearance which the designer corrected in heavier weights—a complete inconsistency in the Futura Family as a whole.

Compare the Futura cap S with its Spartan neighbor, noting how the lower portion fails to make a smooth juncture with the upper curve—thus the spine of the S lacks the graceful flow of the Spartan.

The lower-case of Futura Medium shows notably the adverse effects of the restricted alphabet length. The average is a half-point on each letter—doesn't sound off-hand a serious factor. But .006" average, in this case, is a full 5% of the alphabet length of the face, and it becomes more than that since certain characters (such as i, j, and l) are fixed in set width.

The slightly heavier weight of the Futura Medium also crowds the bowls and contours of the lower-case, again producing the effect of a face slightly smaller than the Spartan Medium.

The short descender on the Futura g is prominent as compared with Spartan g.

The Futura m, n, and u look unduly pinched against the better-proportioned v to z—further inconsistency in design.

ABCDEF GHIJKLMN OPQRST UVWXYZ &
ABCDEF GHIJKLMN OPQRST UVWXYZ &
abcdefghijklmnopqrstu vwx yz
abcdefghijklmnopqrstu vwx yz

FIG. 15—Upper lines in 24-point Spartan Medium Italic compared with 24-point Futura Medium Oblique.

In Fig. 15 we have the **Spartan Medium Italic** against **Futura Medium Oblique**, being the duplexed faces offered on two-letter matrices. Thus the relative set widths are the same and produce the same effects in general as we have noted in Fig. 14, although there are differences in the actual drawing of certain characters. The Futura Oblique cap *S*, for instance, achieves a better spine curve than its vertical companion letter—but the lower finishing curve in the Oblique *S* is pulled a bit into the counter, thus producing a less graceful letter than the Spartan *S*.

The pinching of cap *J* in the vertical form restricts the oblique *J* still further, since the slanting of the oblique must stay within the brass width and the hook at its base suffers as a result. The oblique cap *R* is sim-

ilarly handicapped, but Linotype designers met this problem with complete success.

All the round caps in the Futura are less graceful in drawing than the Spartan equivalents—compare them: *C*, *D*, *G*, *O*, and *Q*.

In the lower-case of the Futura note particularly the *e*. Compare its outer contour with that of the Spartan *e*—an instance of poor drawing that couldn't get by on Ryerson Street, Brooklyn.

The Futura lower-case *g* shows the designer's instinctive effort to avoid the tight quality imposed on the vertical *g* by its short descender. For the oblique *g* the bowl has been perceptibly raised to provide a better swing and balance of the tail—an inconsistency which is repeated in the two heavier weights also.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z &
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z &
a b c d e f g h i j k l m n o p q r s t u v w x y z
a b c d e f g h i j k l m n o p q r s t u v w x y z

FIG. 16—Upper lines in 24-point Spartan Heavy compared with 24-point Futura Demibold.

Spartan Heavy and Futura Demibold are compared in Fig. 16. Here the alphabet lengths are nearly the same (275 for the Spartan and 281 for the Futura) with a slight set-width excess of 6 points for the Futura. Since the same condition applies to the next heavier weight, we might assume that these faces were designed *after* the Spartan Family had begun to make its favorable impression on the industry—designers in all competitive fields are highly responsive to the preferences of the customers.

The caps in this weight are nearly identical, with slight differences in the set width of a few, such as the H and W, which are wider in the Futura.

In the lower-case, the slightly heavier weight of the Futura is apparent. The shorter descenders make the g a problem-letter, as noted in the lighter weights.

The added alphabet length in the Futura comes with a less graceful handling of such letters as m, u, v, w, x, and y.

Spartan Heavy Italic and Futura Demibold Oblique, shown in Fig. 17, reflect most of the characteristics of their vertical companion letters. It is obvious, however, that the designers of the Futura didn't have the same sensitive feeling toward the round letters of the Oblique. Neither C, D, G, O, nor Q have the finely-drawn contours of the tipped oval which give style to the Spartan.

The same absence of controlling shapes affects the Futura lower-case Oblique, with details here and there, such as the heavier arm on the r and the rather soggy s, making the Spartan again a superior rendering.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z &
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z &
a b c d e f g h i j k l m n o p q r s t u v w x y z
a b c d e f g h i j k l m n o p q r s t u v w x y z

FIG. 17—Upper lines in 24-point Spartan Heavy Italic compared with 24-point Futura Demibold Oblique.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z &
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z &
a b c d e f g h i j k l m n o p q r s t u v w x y z
a b c d e f g h i j k l m n o p q r s t u v w x y z

FIG. 18—Upper lines in 24-point Spartan Black compared with 24-point Futura Bold.

In the heaviest weights, Fig. 18 compares the **Spartan Black** (above) with **Futura Bold** (below). Again the Futura designers worked to an alphabet length (331 points) that exceeds the Spartan (318 points). The Futura weight remains about two thousandths heavier, with the same losses in style thereby, due to the added filling of contours and the thickened detail which is inevitable when types are heavily weighted.

In the caps, note how the O and Q of the Futura have been widened to the extent that they definitely lose the circular characteristics of this whole type family. The designers didn't handle the other round letters in the same thoughtless manner—an indication that the project may have been on several draughting tables and not well coordinated. This is a graphic illustration of the conditions that control good typesetting.

The lower-case of this heaviest weight, in both families, becomes the most exacting test of the designers' skill. For the Spartan Black the "color" provided by the chosen weight of stroke is ample for purposes of emphasis. Yet the weight permits a control of letter shapes and details that holds the overall quality of the Spartan design.

The added heaviness of the Futura Bold gains nothing in display values, but it does make the lower-case, especially, a clumsy and actually less readable type than the Spartan. Distortions of contour may be found in almost every character. Note how the counters of a, b, d, g, p, and q in the Futura are ballooned out a bit to meet the vertical strokes—compare with the Spartan letters above them. Another loss in design quality due first to the wrong determination of weight and, second, to inept design thus facilitated. Type design is a most tricky art!

Those readers of this Manual who query the ampersand in the Futura Bold (and its Oblique) will receive a merit award for good proofreading. This defect in the specimen lines we believe due to a wrong font matrix—not a basic flaw in the cutting.

Coming to Fig. 19, we compare the **Spartan Black Italic** (above) with **Futura Demibold Oblique** (below). It is a type designers' tradition that a good italic to match a good roman is a supreme test of skill and judgment. These two competitive faces add to the accumulated demonstration throughout these comparisons—rarely is it possible among examples of modern type-

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z &
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z &
a b c d e f g h i j k l m n o p q r s t u v w x y z
a b c d e f g h i j k l m n o p q r s t u v w x y z

FIG. 19—Upper lines in 24-point Spartan Black Italic compared with 24-point Futura Bold Oblique.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z &
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z &
 a b c d e f g h i j k l m n o p q r s t u v w x y z
 a b c d e f g h i j k l m n o p q r s t u v w x y z

FIG. 20—Upper lines in 24-point Spartan Medium Condensed compared with 24-point Futura Medium Condensed.

foundings to find so closely paralleled a contest in designers' skills and executive judgments.

In both caps and lower-case of this Bold weight, the Futura has suffered inevitable clumsy qualities against the very slightly lighter Spartan Black. The sloped versions added to the problems facing both groups of designers—with Spartan definitely winning. Look at the tightness of Futura *B*, *G*, and *S*.

Futura's *e* will easily fill, under newspaper conditions, and the dots over *i* and *j* offer similar traps. The *g* continues to suffer.

The juncture of the lobes of such letters in the Futura as *a*, *g*, *p*, and *q* (also the arm of the *r*) will also tend to fill and obliterate, with a further loss of style and readability.

The Condensed Faces in these two families, compared in Figs. 20 and 21, are marked by differences in the approach to these faces. The Spartan condensed designs are directly related to their companion weights in the full-width faces. But the Futura condensed versions are thus related only in the Bold Condensed—the Futura Medium Condensed has been made as a taller

letter, fully .060" larger than the 24-point Futura Medium. That change may have been dictated by some customer's request or a mere surmise—but it is a misfit in the Futura family that would become very apparent in occasional combinations of display composition.

The alphabet lengths of these duplexed condensed faces are about the same—the Spartan is 217 points and the Futura 213 points. Each runs in a 90-channel magazine.

Both the Spartan and Futura cuttings lose normally, by the process of squeezing, the more graceful character of the full-width designs. The more notable design loss occurs with the added distortion in the Futura Medium Condensed—which looks surprisingly like the Linotype Erbar Light Condensed, especially in the caps.

In the Futura Bold Condensed the lower-case suffers, by heaviness, with the loss of detail which was noted above in other members of the Futura family. Note the tops of the *a*, *g*, *p*, and *q*, which will easily round off into smudgy forms—the *a* readily confused with the *o* under such conditions. The sharper cutting of the Spartan is a safeguard against this normal problem in newspaper printing.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z &
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z &
a b c d e f g h i j k l m n o p q r s t u v w x y z
a b c d e f g h i j k l m n o p q r s t u v w x y z

FIG. 21—Upper lines in 24-point Spartan Black Condensed compared with 24-point Futura Bold Condensed.

Sales Angles on the Spartan Family

TODAY'S type usages employ sans serif faces for virtually every purpose—and we may reasonably claim that Spartan, with its refined design and its variety of weights and combinations, meets every need. For display and head uses it is sturdy and vigorous, yet meets word-count requirements with its compact design. For many kinds of body matter, as in catalogs, and direct mail material, Spartan provides every facility.

In bookwork, notably for texts and technical books, Spartan has been a most important factor in the recently developed formats which use a black sans serif for side and sub-headings against almost any good roman body type. This vigorous and very readable style of book composition for educational material has been accredited to the many hundreds of different instruction manuals which were printed for the armed forces during the past ten years to teach men how to use the complicated devices of modern armament. Both in typography and in methods of illustration these manuals have provided new ideas to book designers—and Spartan faces have been widely used in the results.

When Spartan is thus employed for heads in bookwork, the two-letter combinations of various weights have some value. But the most versatile possibilities naturally exist on a mixer Linotype. Then two mixing

magazines may carry (1) a good roman face, with either its companion italic and small caps or a companion bold face; and (2) a combination of Spartan in the desired weight, either with its own italic or another weight. But the question of comparative body sizes and alignments must be checked, as indicated on page 12.

If a really complicated text is to be set thus, the possibilities on a four-magazine mixer, plus auxiliaries, become amazingly comprehensive. Then is the time to write in (if time permits) to the headquarters for puzzle-solving: the Typographic Development Division at Brooklyn. The collection of extraordinary type layouts and examples of their uses, which often provides good ads for Linotype in the trade papers, is a highly useful sales stimulator. Use it!

In the Spartan Family specimen folder there are many examples of these types at work. When this unit for your Sales Manual was being planned, our Director of Typographic Development observed: "This is going to be a tough one—the ramifications are certainly terrific!" But meantime the specimen folder has come through, with its excellent presentations of the family details of Spartan. We have herein added a variety of supplementary information which, it is hoped, will make the ramifications seem less complicated and will channel them into the variety of sales ammunition which this great type family so well deserves.

Sales Precaution on Spartan Fractions

EXPERIENCE among the many users of Spartan has developed an occasional problem, with kicks and arbitration, that calls for this repetition of a word of caution when making up a Spartan order. This subject has been covered in the *Executive Letter*—EL 53 and EL 62. These are the conditions involved:

Normal Fractions for Spartan (as they appear in the Spartan specimen folder) were designed for their graceful appearance. In most of the sizes and weights they are less than the usual em width and thus require additional spacing in tabular work. This makes exact tabular justification slow and (in a few cases) unattainable.

Special No. 1 Spartan Standard Fractions meet tabular requirements. They are equal in measure to one em, or to one em with thin space where the space is on the same brass as the points. They are somewhat fatter in appearance but they justify readily in setting tables.

When a customer places an order for any Spartan face he should carefully survey his future uses of the face. If he foresees no tabular work he will undoubtedly prefer the more graceful *Normal Fractions*.

But if there is a possibility of tabular work ahead, then he should have the *Special No. 1 Spartan Standard*

Fractions. In this distinction the word "Standard" derives from the traditional use of em widths for fractions designed with an oblique stroke ($\frac{1}{2}$). Narrower fractions, with the horizontal stroke ($\frac{1}{2}$) conventionally use the figure width of the face for which they are designed.

Special needs, over many years, have brought the variety of cuttings of fractions which we note in the big red Specimen Book.

We repeat the *Executive Letter* precautions on writing and filling Spartan orders:

Normal Fractions for Spartan faces (as shown in the Spartan specimen folder) will be supplied unless otherwise specified.

Special No. 1 Standard Fractions are supplied *when so indicated on the order* for any sizes of the following combinations:

Light with Medium
Medium with Heavy
Book with Heavy

In case of doubt as to the customer's future uses of the face the wise precaution is to order *both* styles of fractions. The extra cost is slight compared to the urgency of some unforeseen need.