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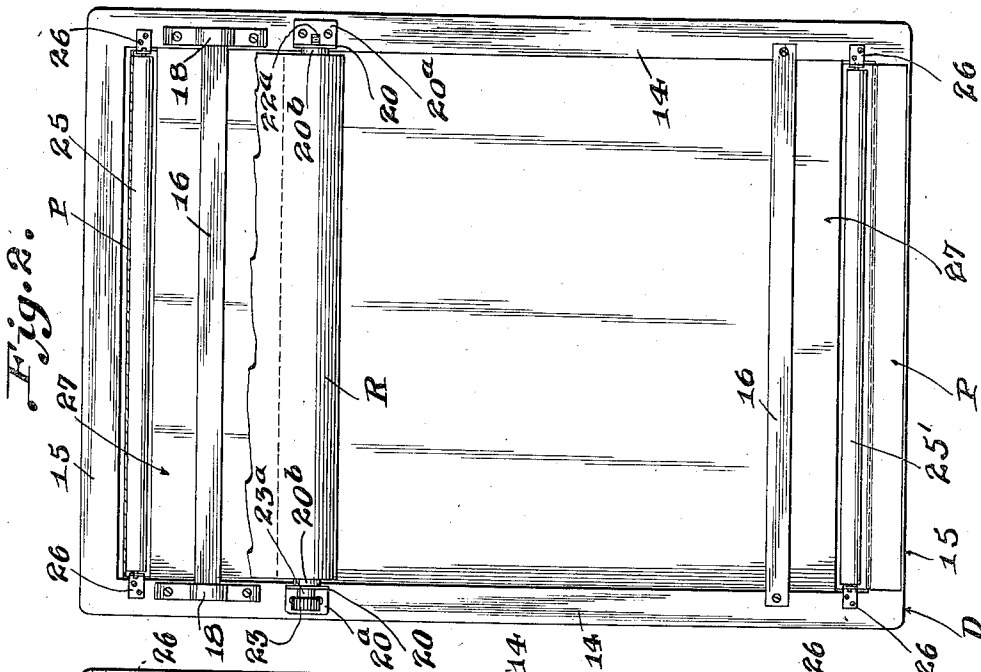
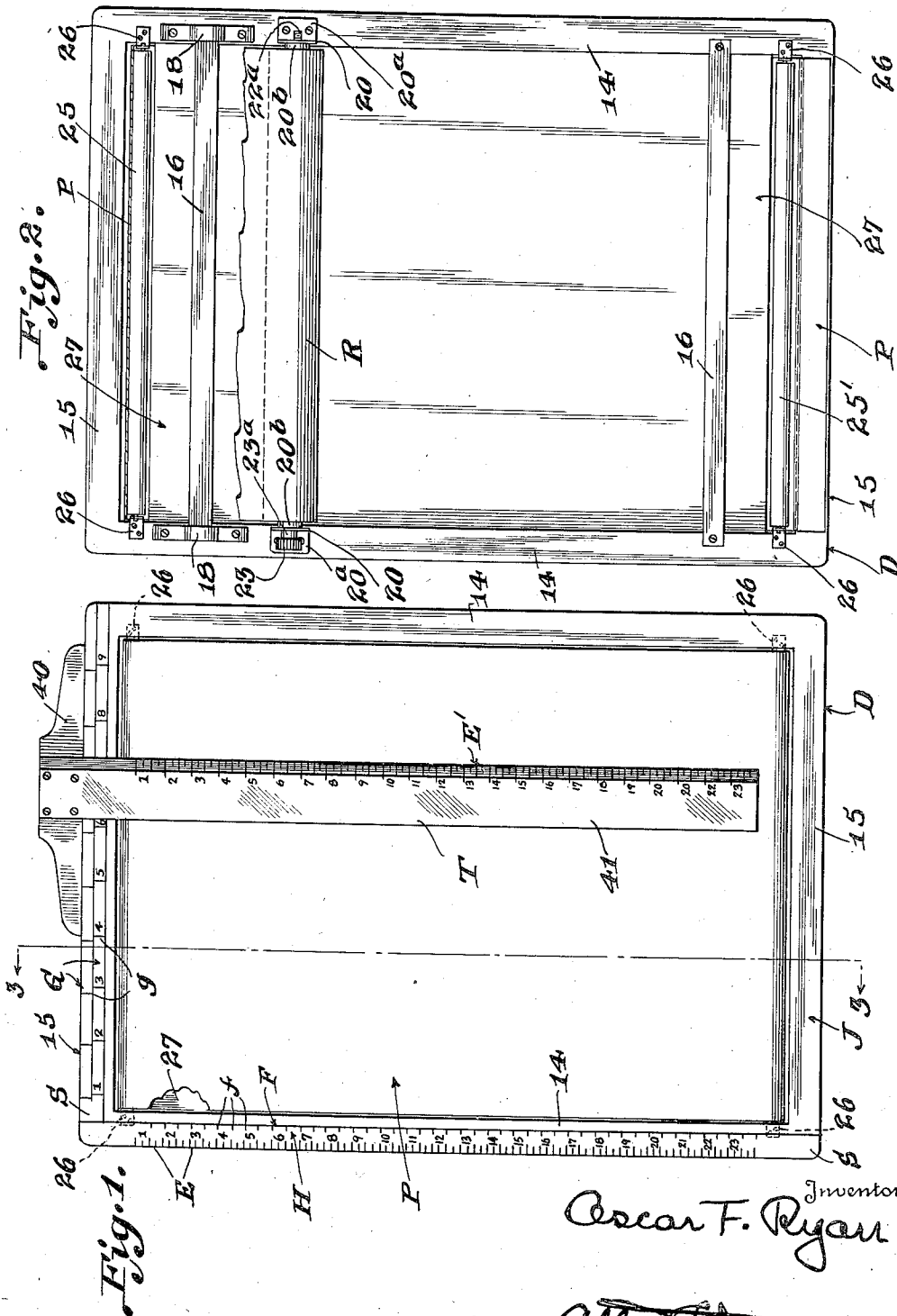
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ADVERTISING LAYOUT BOARD

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ADVERTISING LAYOUT BOARD

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10 Claims. (Cl. 45—131)

This invention relates to certain improvements in advertising layout boards; and the nature and objects of the invention will be readily recognized and understood by those skilled in the art in the light of the following explanation, and detailed description of the accompanying drawings, illustrating what I at present believe to be the preferred embodiments or mechanical expressions of my invention from among various other forms, arrangements, combinations and constructions of which my invention is capable within the spirit and the scope thereof.

Considerable difficulties are encountered in planning and arranging the layout of advertising matter or copy for newspapers, magazines and such like printed forms of advertising or display printing, and particularly in arranging and blocking out various sample layouts of the copy in the effort to determine the most effective and appealing arrangements in view of the space available for printing and displaying the copy, and then preparing a sample of the desired arrangement or layout that is to be followed by the actual printed advertisement. In preparing such sample or test layouts it is desirable to work on a surface, such as a sheet of paper, of the actual size of the sheet or space on which the advertisement or display is to be printed, and to prepare the desired arrangement or layout of the copy to full scale.

However, with available equipment, the laying out and arranging of advertising or display copy in sample or test form is a time consuming operation that is difficult to carry out and, except at the sacrifice of time, is not generally precise and accurate to the degree necessary and essential for the desired efficient and satisfactory results in actual practice. These difficulties are increased when the effort is made to prepare and draft such sample or test layouts to full scale, especially with the larger sizes, such as for newspapers, due to the necessity of obtaining and positioning on a suitable surface a separate sheet of paper for each sample layout to be prepared, and further, because of the required variety of measuring instruments and the time consumed in their manipulation and use.

It is a general object of my invention to materially reduce the foregoing and various other difficulties, by providing a mechanically simple and efficient apparatus which can be used to relatively rapidly and accurately prepare and draft sample or test layouts or arrangements of advertising copy or other printed matter on sheets of paper to full scale, and which appa-

tus decreases not only the number and time of operations necessary in preparing and arranging the paper on which the layouts are drafted, but also reduces the number of separate measuring instruments that must be handled and manipulated in carrying out such work.

A further object of the invention is to design such an apparatus in the form of a drawing or drafting board of compact and readily portable type, in which provision is made for mounting a supply of paper in continuous strip form with the paper positioned to constantly provide an area of the desired size for drafting or layout work thereon, and which can be readily torn off as a sheet when the layout is completed thereon; and further to incorporate as elements of the apparatus the essential measuring instruments in proper relation to the area of the paper presented for work for rapid and accurate use therewith in the work of arranging and drafting a layout on the paper.

Another object and a feature of the invention is to provide a construction and relative arrangement of the supporting frame structure and the paper carrying and drafting or layout board forming structure, to form gripping jaws between which the free end of the continuous paper strip is held and through which the strip is easily drawn and then torn off into sheet form as required.

A further object of the invention is to incorporate into the drafting or layout board of the apparatus, suitable scales in such relation to the paper on which advertising or the like copy is to be laid out, that the division and measuring of the paper to correspond with the actual printed sheet is rendered rapid and accurate; and further, to combine with such scales, a movable scale to aid in the projection of the measurements from the fixed scales onto the paper.

The invention also holds as another object thereof, the provision of a structurally and mechanically simple mounting for the roll of paper and for slidably moving the paper to and from position on and over the layout board while maintaining the paper in the required position against undesired displacement; and further, to provide for controlling the unwinding of the paper roll as sheets are withdrawn from the board and torn from the continuous paper strip.

A further object is to provide a design, construction and arrangement of such apparatus to present a drafting or layout board of general adaptability to various types and sizes of ad-

vertising layout work, as well as to analogous layout or drafting operations.

With the foregoing general objects and results in view, as well as certain others, that will be recognized from the following explanation, my invention consists in certain novel features in construction and in combinations and arrangements of elements and parts, all as will be more fully and particularly referred to and specified hereinafter.

Referring to the accompanying drawings, in which similar reference characters refer to corresponding parts throughout the several figures:

Fig. 1 is a top plan view of a layout board of my invention particularly intended for newspaper or magazine advertisement layouts; and showing particularly the scale arrangements and their relation to the paper in position on the layout board.

Fig. 2 is a bottom plan of the underside of the layout board of Fig. 1, and showing the mounting and arrangement of the paper roll holder and of the rollers over which the paper is passed when positioned on the drafting board for use, the base supporting frame being removed.

Fig. 3 is a view in side elevation of the apparatus of Fig. 1, showing the pivotal mounting of the layout board on the supporting base with the paper gripping jaws formed by the adjacent lower ends of the base and board.

Fig. 4 is a longitudinal vertical section taken as on the line 4—4, of Fig. 1, showing a roll of paper in mounted position with the paper in operative position over the board and gripped at its free end between the jaws formed by the board and base.

Fig. 5 is a detail vertical section through the jaw forming lower end portions of the layout board and the supporting base frame, showing particularly the construction and mounting of the rubber paper engaging members between which the free end of the paper extends and is gripped.

Fig. 6 is a transverse vertical section taken as on the line 6—6, of Fig. 3, and showing the mounting of one of the paper carrying and guide rollers.

Fig. 7 is a transverse vertical section taken as on the line 7—7, of Fig. 3, and showing the pivotal or hinge mounting of the layout board on the supporting base frame.

Fig. 8 is a vertical transverse section taken as on the line 8—8, of Fig. 3, and showing the mounting for the paper roll in position at the under side of the layout board.

One possible form and mechanical expression of a layout board incorporating my invention is disclosed in the accompanying drawings purely by way of an example and not of limitation. Such example of the invention is particularly designed and intended for use in arranging and laying out newspaper, magazine and such like advertising copy, in the form of sample or test layouts to be followed in setting up the printed advertisement or copy, but it is to be understood that in its broader aspects, a layout or drafting board of my invention is not necessarily limited to such particular uses, but is adapted to embodiments and arrangements for a variety of other general drafting purposes and uses.

The advertising copy or printed matter layout board that I have selected for an example herewith for the purpose of explaining my invention, includes a supporting base or frame structure B, that takes an open rectangular form, and a draft-

ing or layout board structure D that is pivotally or hinged mounted and supported thereon adjacent one end of the board and base, with the pivotally mounted end of the board structure D elevated above the base. The board structure D is inclined downwardly from its pivotally mounted end, to the opposite end of base frame B, with the free, lower end of board D resting and supported on the adjacent end of the base frame, and the upper side of the board structure D presenting an inclined working or drafting surface.

The supporting base frame B includes, in the specific example hereof, the parallel side or longitudinal members 10 and the parallel end or transverse members 11, formed of any desired material suitably joined together into a rigid frame structure. Similarly, the drafting or laying out board structure D, in this instance includes a rectangular exterior frame composed of the parallel side members 14 and the parallel end or transverse frame members 15, of any desired material suitably joined into frame form. If desired, the exterior frame of the board structure D may include suitable transverse cross braces 16 at the under side of structure D extending between and secured to the side members 14 adjacent but spaced from the end members 15, respectively.

The pivotal mounting and elevated support for the layout board D may, as in the example hereof, include the vertically upwardly disposed brackets 17, secured in transversely aligned position on the opposite side members 10 of base frame B, and the vertical depending brackets 18 fixed in transversely aligned position on the opposite side members 14 of the exterior frame of layout board structure D. The brackets 17 and 18 are mounted in position adjacent the elevated end of board structure D, while the depending brackets 18 are arranged in assembled position of base B and frame D to be within the brackets 17 and to be pivotally mounted thereon by the horizontal pivot pins 19 extended through the joined pairs of brackets 17 and 18.

Thus, the layout board structure D is elevated at one end and extends downwardly to the opposite end of the base frame B, with its lower free end resting upon the adjacent end of the frame therebeneath, as will be clear, by reference to Figs. 3 and 4 of the drawings in particular. By such arrangement and mounting the board structure D can be swung or rocked vertically on the elevated mounting 17—18, by raising and lowering the lower free end thereof from and to normal position supported on the adjacent end of base frame B.

The area or space within the exterior frame 14—15 of the layout board structure D provides a working or layout area that is supplied with and receives the paper upon which the layout is made (see Fig. 1), and in accordance with a feature of my invention paper P is supplied to and covers this area as a strip or web unwound from a roll of paper R carried by and beneath the upper or elevated portion of the layout board D. Such paper roll R is mounted transversely of and beneath board D adjacent and at the inner side of the pivotal mountings 17—18, and in the particular example hereof the mounting for the roll R includes the hangers 20 fixed to the under side of opposite side members 14, respectively, in transverse alinement and the shaft or rod 22 extending between and supported at its opposite ends, respectively, in the hangers 21.

Referring to Figs. 3, 4 and 8, these hangers 20

of the paper roll mounting, in this instance, provide the relatively thin spring metal depending plate portions having the base flanges 20a by which they are suitably fixed in position on the under sides of frame members 14 (see Fig. 8) and include the central thickened portions 20b to form the bearings through which the rod or shaft 22 removably extends and is mounted. The rod or shaft 22 is externally threaded at 22a at one end thereof and at its opposite end is provided with a knurled wheel 23 for manually rotating the same in applying and removing the shaft to and from mounted position. The bearing 20b of that hanger 20 which is to receive the threaded end 22a of shaft 22 is internally threaded and into which such end of the shaft is screwed. The knurled wheel 23 of shaft 22 has an inwardly extended hub 23a that engages the adjacent hanger 20 when the shaft is in mounted position, for a purpose explained hereinafter.

The roll of paper R is mounted in operative position beneath layout board D, by holding the roll in position between hangers 20 and then extending rod or shaft 22 through the opposite hangers 20 and the core of the paper roll. The roll is thus freely rotatably mounted on shaft 22, while the shaft is supported by the hangers 20. The threaded end 22a of shaft 22 is screwed into its hanger bearing 20b until the inner end of hub 23a of hand wheel 23 is engaged against the outer side of adjacent hanger 20. As the hanger 20 is resilient it can be forced or sprung inwardly against the adjacent end of the paper roll R, to thus act as a brake or resistance controlling the rotation of the roll in unwinding the paper P therefrom, as may be desired.

The exterior frame 14—15 of the layout board D is provided with a transverse roller 25, preferably formed of steel, although not so limited, freely rotatably mounted extending between frame side members 14 in proximity to and parallel with the upper end frame member 15, but spaced inwardly a slight distance therefrom, as clearly shown in Figs. 3 and 4, of the drawings. The roller 25 is rotatably mounted and carried at its opposite ends in the brackets 26 fixed to the under sides of frame side members 14, respectively, and extended upwardly between said members and the adjacent ends, respectively, of roller 25 (see Fig. 6). The opposite ends of the roller 25 are formed of reduced diameter to provide the stub shaft or pins journaled in the brackets 26. A roller 25' in all respects similar to upper roller 25, is mounted on the frame between the side members 14, but at the lower ends thereof and parallel with but spaced slightly from lower end cross member 15 of the frame (see Fig. 5). This lower transverse roller 25' is mounted on brackets 26 identical with those for upper roller 25, and is parallel with the upper roller. Both upper roller 25 and lower roller 25' are of such a diameter and so mounted relative to frame 14—15, that the upper sides of these rollers are disposed slightly below the horizontal plane of the upper surfaces of the frame side and end members 14 and 15.

The space or area on the layout board structure D between frame side members 14 and the upper and lower rollers 25 and 25', is closed by a suitable base board 27 secured therein to the frame side members and providing the layout board surface over which the paper P extends and on which it rests for drafting and layout work thereon. The base board 27 is formed and mounted in the frame 14—15 with its upper surface in

a plane slightly below the plane of the upper surface of the layout board frame 14—15, and with its upper and lower ends terminating in close proximity to upper and lower rollers 25 and 25', but allowing operating clearance for free rotation of such rollers (see Figs. 2, 4 and 5).

With the foregoing arrangement of the layout board D, the paper P is unwound from the lower or underside of the roll R and is passed upwardly to and around the outer side of upper roller 25, between the frame end member 15 and the roller, and then downwardly over the base board 27 to the lower roller 25'. The paper P passes downwardly over lower roller 25' and is then extended forwardly or outwardly between the lower end members 11 and 15 of the base frame B and layout board D to the exterior thereof where the free end of the paper strip or web remains accessible to the user of the apparatus. As the lower end of the layout board D rests by gravity 20 on the lower end of the base frame B, with the paper P extended and engaged therebetween, such adjacent and engaged ends form and provide upper and lower paper clamping jaws J and J' that secure and hold the paper strip or web against inadvertent displacement.

Following a further feature of my invention, the paper engaging jaws J and J' formed by the meeting lower ends of base B and board D, are provided with paper gripping and engaging surfaces that are arranged to straighten out the paper web as it comes from roller 25' and maintain the same in horizontal position substantially parallel to the horizontal plane of base frame B. For example, the base frame end member 11 of jaw J' is provided with a rubber or other suitable material strip 30 secured on the upper side thereof and constituting the paper gripping surface of the lower jaw J', referring now to Fig. 5 of the drawings in particular. Similar rubber or other suitable material strip 31 is secured along the under side of the frame member 15 of upper jaw J, but in order to have its lower face parallel with the upper face of rubber strip 30, a levelling strip 32 of wood or other material, substantially triangular or wedge shape in cross-section, is secured to frame member 15 and the rubber strip 31, with the rubber strip 31 secured thereover and thereto in position parallel with the paper gripping strip 30. The paper strip P is held and engaged between these rubber strips 30 and 31, and is held in horizontal position extending outwardly therebetween.

While I have shown in the particular example hereof, the separate levelling strip 32 over which rubber strip 31 is secured, my invention is not so limited, as the under side of jaw J can be formed to provide an integral surface parallel with the upper surface of jaw J'm and onto which the paper gripping strip 31 may be secured.

In use the paper P is drawn from the roll R across the layout board D by grasping the free end of the paper web and drawing the paper outwardly through the jaws J and J', and the arrangement of the paper gripping strips 30 and 31 provides the outer or lower side edge 33 of jaw J as a cutting or tearing edge for tearing off a desired sheet of paper from the paper strip or web. A sheet of paper is torn off from the strip of paper P by grasping the withdrawn portion and pulling it laterally and upwardly across the cutting edge 33 to sever such portion from the paper strip.

An important feature of my invention that contributes to the efficient results obtained in

use, resides in incorporating the essential measuring instrumentalities or scales in the layout board structure D, in proper relation to the paper P when the paper is in position over base board 27 for drafting or layout work thereon. As the example of the invention here illustrated is primarily intended for laying out newspaper, magazine, and such like advertising copy, the incorporated measuring instruments or scales are designed and adapted for such work. However, it is to be understood that the invention is not limited to such particular measuring instruments or scales, as the character thereof is dependent upon the type of work to be performed with the laying out apparatus, and various other scales or measuring means, dependent upon the character of work to be performed, can be substituted and are to be considered as equivalents and included within the broad scope of my invention.

In the illustrated example, referring now to Fig. 1 of the drawings, the left-hand longitudinal or side member 14 of the exterior frame of the layout board structure D, carries thereon the scales E and F, while the upper end transverse frame member carries thereon and thereacross, the scales G. The scale E is an inch scale in which the inch divisions or scale markings are consecutively numbered from the upper end of the scale to the lower end thereof on the inclined side member 14, with each inch preferably divided into quarters. This inch scale E is disposed along the outer side of the upper surface of frame member 14, and extends between the upper end of paper P on the layout board at about the lower side of the upper roller 25, and the lower end of paper P at about the upper side of lower roller 25'.

The scale F is disposed along the inner side of the upper surface of left-hand side member 14, substantially co-extensive with the scale E, and consists preferably of the series of spaced, scale markings e, that may be formed by suitable indentations or otherwise, to define "squares" for printing work to include ten (10) lines of printing between each square.

Preferably, a third scale H is included between scales E and F, which consists of the spaced lines h of six (6) of such lines to each inch of scale E, this scale H presenting the scale markings or lines h as "pica" lines to denote such printing or type measurement as six (6) "pica" lines to the inch. Obviously, other printing or type line measurements can be provided for scale H, by either additional scale markings or lines suitably spaced for the desired measurement, or by providing a scale H with the lines h suitably spaced for the desired measurement.

The scales G across the upper end of the layout board include the spaced scale lines or markings g that denote the width and number of columns of printed matter on the newspaper or magazine page for which the advertising or other copy is to be arranged or laid out. Each of the scales G, there being but two shown in this instance, has its markings or lines g spaced to give different widths and/or number of columns to a page, so that the layout board will have a range of column scales to cover various column width and number arrangements. Additional scales G may, of course, be provided if it is desired to increase the range of column numbers and widths.

While the present example does not illustrate them, other scales may be provided along the right-hand longitudinal frame member 14, such for example, a scale to indicate "lines" that is a

spacing of the scale markings to indicate fourteen (14) "lines" to the inch, or any other desired or suitable scales.

The various scales may be applied on the layout board in any suitable manner, but the invention contemplates and includes the use of strips bearing the scales and removably secured in position so that they may be changed for other scale arrangements if desired, and the illustrated example is to be considered as showing such scale strips S removably applied to the layout board frame members 14 and 15, in proper relation to the paper P on the base board 27.

The apparatus of the invention further includes a movable scale member, which in this instance takes the form of a T-square, and which in normal position has its head 40 slidably engaged over the upper end frame member 15 and its arm 41 disposed downwardly and longitudinally over and across the layout board D and the paper P thereon. The arm 41 of this T-square, in this instance is provided with an inch scale E' that corresponds to and with the T-square in operative position is co-extensive and has its markings aligned with the markings of the inch scale E on the layout board frame. Thus, the arm 41 of the T-square serves to project downwardly across the paper P, the column spacings from the scales, while the inch scale E' thereon serves to project or mark off the spacings vertically of the paper P. The T-square is of course movable to position with head 40 engaged over a side of layout board D and the arm 41 thereof extended transversely across paper P in projecting distances from scales on the sides of the board.

In use, the drafting or layout apparatus of the disclosed embodiment is supplied with a roll of paper R mounted on the rod or shaft 22 carried by hangers 20 beneath the layout board D, which paper is unwound and extended over rollers 25 and 25' and outwardly between and gripped by the jaws J and J', with the paper extended on and over the base board 27 in position for drafting or layout work thereon. The free end portion of the paper is held between the jaws J and J' by the weight of the board D resting on the paper between the gripping surfaces 30 and 31. Sufficient friction or resistance is placed on the paper roll R by the hanger 20 engaged by hub 23a of wheel 23 to prevent the roll from unwinding too freely, with the result that the length of paper P covering base board 27 is held and maintained at both ends thereof against displacement or slipping under normal drafting and layout work thereon.

With the present form of the apparatus design particularly for advertising copy layout for magazines, newspapers and the like, it may be considered that the area and dimensions of the paper P covering base board 27 corresponds in full size to a page of a newspaper or magazine. It is then only necessary for the user to employ the column scales G to define the columns on paper P, and the side scales E, F and H, to measure off distances longitudinally of the paper in inches and/or lines of type, to arrange and layout the desired copy in the exact manner it is desired to have it appear on the printed page, as the various scales are in the proper fixed relation to paper P on base 27 representing the actual printed page. In the laying out or drafting the T-square T is employed in drafting and measuring lines and distances from the various scales. In this manner, very rapid and accurate drafting and layout work is possible, due primarily to the

presence in the apparatus of the essential measuring scales in proper relation to the paper and the elimination thereby of separate measuring instruments and any necessity for manipulation and adjustment.

Such drafting or layout work is further materially speeded up and rendered more efficient by the arrangement that provides for using a strip or web of paper from a roll and from which strip a sample or test layout sheet can be torn when completed. Upon completion of the layout work on the sheet defined by the paper on base board D, the user merely grasps the free end of the paper strip at the exterior of jaws J and J' and withdraws the paper outwardly between these jaws until the completed sheet is removed therefrom. Then by pressing the upper jaw J downwardly to grasp the paper against slipping, the sheet can be easily torn from the paper strip against and across the tearing edge 33 of upper jaw J. The act of drawing out the strip from the jaws unwinds the paper strip or web from the roll R and replaces another length of paper over base board 27 in constant position for instant work thereon.

Obviously, the dimensions and arrangement of base board 27 in relation to the scales need not be such as to provide only for full scale work, but may be designed or arranged for enlarged or reduced scale drafting and layout.

It is also evident that various changes, modifications, variations, substitutions, eliminations, and additions might be resorted to without departing from the spirit and scope of my invention, and hence, I do not wish to limit myself in all respects to the exact and specific disclosures of the example hereof.

What I claim is:—

1. In drafting apparatus, a base structure, a layout board pivotally mounted and supported in elevated position at one end thereof from said base, the opposite end of said board engaging and supported on the adjacent end of said base, said engaged ends of the board and base forming paper gripping jaws adapted to secure a strip of paper extended therethrough, support means at the under side of the elevated end of said board for rotatably mounting a roll of paper beneath and transversely of the board, and paper strip guiding means at opposite ends of the board for receiving the strip paper from said roll extended downwardly across the upper side of said board to said gripping jaws.

2. In drafting apparatus, a base structure, a drafting board above the base pivotally mounted and supported in elevated position at one end thereof from said base, the opposite end of said board engaging and supported on the adjacent end of the base, and said engaged ends of the board and base formed to provide jaws for gripping therebetween the lower end of a strip of paper on said board.

3. In drafting apparatus, in combination, a base, a drafting board mounted in inclined position above said base and pivotally supported therefrom at its elevated end, the lower end of said board engaging and vertically movably supported on the adjacent end of the base, and the engaged ends of the board and base provided with paper gripping members on their inner surfaces for engaging and gripping therebetween the lower end of a sheet of paper on the drafting board.

4. In drafting apparatus, in combination, a base, a drafting board mounted in inclined posi-

tion above said base and pivotally supported therefrom at its elevated end, the lower end of said board engaging and vertically movably supported on the adjacent end of the base, the engaged ends of the board and base providing jaws for receiving the lower end of a strip of paper on the board therebetween, the upper side of the jaw forming end of the base provided with a paper engaging strip substantially horizontally disposed and the under surface of the jaw forming lower end of the board provided with a paper engaging strip presenting an under surface substantially parallel with the upper surface of the paper engaging strip on the end of the base.

5. In drafting apparatus, in combination, a base, a drafting board mounted in inclined position over said base and pivotally supported therefrom at its elevated end for vertical rocking, the lower end of said board engaging and vertically movably resting on the adjacent end of the base, said engaged ends of the board and base forming jaws for gripping the lower end of a sheet of paper on the board therebetween, and the upper jaw forming lower end of the board providing a cutting edge against which the portion of a sheet of paper extended outwardly through said jaws can be torn off.

6. In drafting apparatus, a base, a drafting board mounted in inclined position over said base and pivotally supported therefrom at its elevated end for vertical rocking, the lower end of said board engaging and resting upon the adjacent base end therebeneath to form therewith gripping jaws for receiving therebetween the lower end of a strip of paper on said board, a roll of paper mounted transversely beneath the elevated end of said board and rotatable to unwind the strip of paper therefrom, a roller transversely across the upper end of the board, a roller transversely across the lower end of the board, said board formed with transverse paper strip receiving openings therethrough adjacent said rollers, and the strip of paper unwound from said roller extended upwardly through the upper end opening in the board, over the adjacent roller, downwardly over the board to said lower roller and then through the adjacent board opening to and gripped between the jaw forming ends of the board and base.

7. In drafting apparatus, a base, a drafting board mounted in inclined position over said base and pivotally supported therefrom at its elevated end for vertical rocking, the lower end of said board engaging and resting upon the adjacent base end to form therewith gripping jaws for receiving and holding therebetween the lower end of a strip of paper on said board, a roll of paper mounted beneath the elevated end of said board for unwinding to extend a strip of paper from the roller downwardly over the board between said gripping jaws and means for resisting unwinding of said roll to thereby hold the strip of paper on the board at the upper end thereof.

8. In drafting apparatus, a base, a layout board mounted in inclined position over said base and pivotally supported therefrom at its elevated end for vertical rocking, the lower end of said layout board resting normally upon the adjacent base end, a roll of paper mounted transversely beneath the elevated end of said board and rotatable to unwind the strip of paper therefrom, a roller transversely across the upper end of the board, a roller transversely across the lower end of the board, said board formed with transverse

paper strip receiving openings therethrough adjacent said upper and lower end rollers, respectively, the strip of paper unwound from said roller extended upwardly through the upper end opening in the board, over the adjacent roller, downwardly over the board to said lower roller and through the adjacent board roller to and across the lower end of said layout board, and the lower end of the layout board formed to provide a paper engaging surface and cutting edge against which the portion of the paper strip extended outwardly from the lower end of said board can be torn off.

9. In drafting apparatus, in combination, a base, a layout board pivotally mounted and supported in elevated position at one end thereof from said base, the opposite end of said board normally supported on the adjacent end of the base and vertically movable to and from the base by vertical rocking of the board from its opposite pivotally mounted end, the upper surface of the board providing a paper receiving space, support means at the under side of the elevated end of said board for rotatably mounting a roll of paper beneath and transversely of the board, paper strip guiding means at opposite ends of the board for receiving the strip paper from said roll extended downwardly across the upper side of said board to the lower vertically movable end thereof, the lower end of said board providing a paper engaging surface across which the end

of the paper strip extends and is frictionally engaged, and means cooperating with the lower end of the board to normally maintain the paper strip in frictional engagement therewith.

10. In drafting apparatus, in combination, a layout board pivotally mounted and supported at one end thereof from said base, the opposite end of said board normally supported on the adjacent end of the base and freely vertically movable to and from normal supported position on the base by vertical rocking of the board from its opposite pivotally mounted end, the upper surface of the board providing a paper receiving space, support means at the under side of the board for rotatably mounting a roll of paper beneath and transversely of the layout board, means for resisting unwinding of a paper roll on said support means to thereby maintain a strip of paper in position at one end on said paper receiving space, paper strip guiding means at opposite ends of the paper receiving space of said board for receiving the strip paper from said board extended across the board to the freely vertically movable end of the board, and the said vertically movable end of the board providing a surface for frictionally engaging the free end portion of a strip of paper extended across the board to normally maintain such end of the paper against displacement.

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