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J. KOMOROUS
SHEET SECURING MEANS
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Fig. 1.

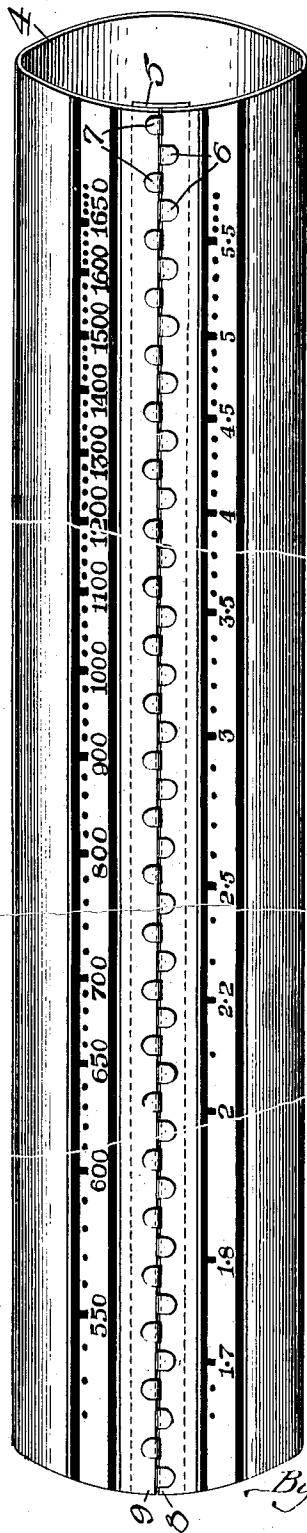


Fig. 2.

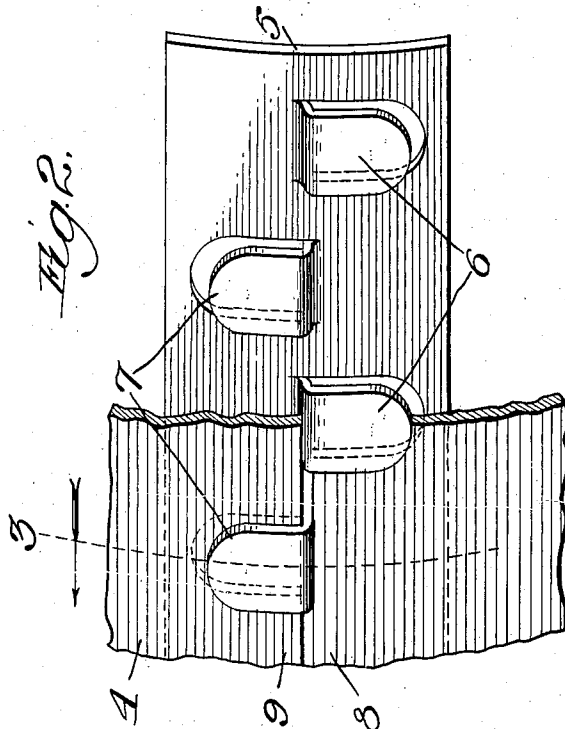
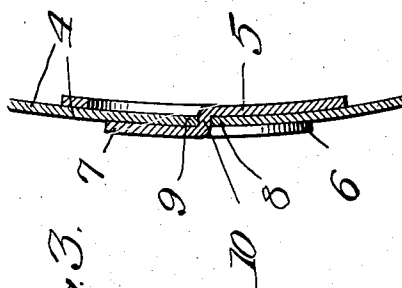


Fig. 3.



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SHEET SECURING MEANS

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5 Claims. (Cl. 24—81)

My invention relates to means for securing to-
gether adjacent sheet edges, as for example, and
more particularly, the adjacent edges of sheets,
such as for example of celluloid, bent into cylin-
drical shape and bearing suitable indicia to form
cylinder tuning dials for radio receiving appara-
tus.

One of my objects is to provide a novel, simple
and inexpensive construction of sheet-edge se-
curing means.

Another object is to provide a construction of
securing means which may be easily applied to
operative position and the structure reduced to
cylindrical finished form by the purchaser prefer-
ably with the securing means preliminarily se-
cured to one edge of the sheet at the factory,
whereby the sheets may be shipped in flat con-
dition with the manifest advantage.

Another object is to provide a securing means
whereby the sheet edges may be secured together
in edgewise opposed relation.

Another object is to provide a construction of
securing means for celluloid sheets whereby the
procedure of heating the sheet by contact with
heated forms to soften it required when securing
means as hitherto employed are used in the form-
ing of cylinders of small diameters, are rendered
unnecessary.

Another object is to provide a construction of
securing means which will be relatively thin,
thereby avoiding a bulky joint between the sheet
edges, preferably with the sheet edges in edge-
wise opposed relation, a feature which is of par-
ticular advantage in the case of a radio tuning
cylindrical dial; and other objects as will be
manifest from the following description.

Referring to the accompanying drawing:

Figure 1 is a view in side elevation of a cylin-
drical tuning disk for radio receiving apparatus
and embodying my invention.

Figure 2 is a similar fragmentary enlarged view
of the dial showing certain portions broken away;
and

Figure 3, a fragmentary sectional view taken
at the line 3 on Fig. 2 and viewed in the direction
of the arrow.

The particular construction shown comprises
a sheet 4 of any suitable material, as for example,
and preferably, celluloid, bent into cylindrical
form with adjacent edges secured together by
sheet-edge securing means embodying my inven-
tion; the sheet bearing suitable indicia, as shown,
for causing the cylindrical structure formed
therefrom and rotatably supported in any suit-
able way, such as is well known in the art, to be

used as a tuning dial in a radio receiving appara-
tus.

The sheet-securing means shown comprises a
strip 5 of metal provided with two series of
tongues 6 and 7, respectively, at a face thereof
with the bases of the tongues located substantial-
ly coincident with the median line of the strip.
The tongues 6 and 7 extend toward the opposite
longitudinal edges, respectively, of the strip to
afford means whereby the adjacent edges 8 and
9 of the sheet 4, which are positioned to extend
between the tongues and the body of the strip,
may be securely clamped in position to the strip.

Preferably, and as shown, the tongues 6 and 7
are formed of the metal forming the strip, by
partially severing the metal of the strip to form
the tongues and then bending the partially se-
vered portions into the shape shown to cause the
tongues to extend in a plane slightly forwardly
offset from the plane of the body of the strip
and present shoulder portions 10 at their bases
whereby the sheet edges 8 and 9 may be entered
between the tongues 6 and 7 and the body of the
strip and readily accurately positioned relative to
each other and to the strip, by seating them
against the shoulders 10. To insure against the
accidental displacement of the sheet edges, the
tongues, after application of the sheet edges to
the strip as stated, may be forcibly bent against
the sheet by using any suitable means for this
purpose.

As will be understood, the operation of as-
sembling the sheet and securing means is a very
simple one and can be effected without requiring
a factory operation or machinery especially con-
structed for this purpose. This is of particular
advantage as it permits of the sheets being
shipped in flat condition, either with the securing
strips secured to one edge only or wholly de-
tached from the sheets, and the assembling op-
eration performed or completed, as the case may
be, by the purchaser.

Another advantage of the construction is that
the edges of the sheet at the joint are in edge-
wise opposed relation and this feature, particu-
larly in combination with securing means of the
construction shown, insures the inexpensive pro-
duction of a substantially perfect cylinder with-
out undue thickness of structure at the joint.

Furthermore, by providing a securing means
as described, celluloid sheets may be formed into
cylinders of all desired diameters and their ad-
jacent edges secured together without requiring
the softening of the sheets prior to such opera-
tions.

While I have illustrated and described a particular embodiment of my invention, I do not wish to be understood as intending to limit it thereto as the structure shown may be variously modified and altered and the invention embodied in other forms of structure and in structures provided for other uses than that above described, without departing from the spirit of the invention.

What I claim as new, and desire to secure by Letters Patent, is:

1. Securing means for sheet edges comprising a strip member, series of tongues at a face thereof with the bases of said tongues in substantial alignment lengthwise of the strip member, one of said series of tongues extending outwardly toward one lateral edge of said strip member and the other of said series of tongues extending outwardly toward the opposite edge of said strip member.

2. In combination, edges of a sheet to be secured together to form a cylinder and means for securing said edges together, comprising a strip member and series of tongues on said strip member extending in opposite directions toward the adjacent lateral edges, respectively, of the strip member, one edge of said sheet being clamped between said strip member and the adjacent ones of said tongues, and the other edge of said sheet being clamped between said strip member and the others of said tongues, the tongues projecting in each direction interspersed with tongues projecting in the opposite direction.

3. Securing means for sheet edges, comprising: a strip member to extend continuously along the length of the edges to be connected and to underlie both of said edges at the joint therebetween, a plurality of tongues struck from the material of the strip with their bases in substantial alignment midway of the width of the

strip, a plurality of said tongues projecting in each direction from their bases, with oppositely directed tongues interspersed.

4. Securing means for sheet edges, comprising: a strip of metal to underlie and extend continuously along the edges, a plurality of tongues struck from the metal of the strip, the bases of said tongues projecting at substantially 90° from the material of the strip and in alignment thereon, the bodies of said tongues bent alternately in opposite directions from said bases into substantial parallelism with the surface of said strip and spaced therefrom a distance substantially equal to the thickness of said edges, whereby said edges may enter under said bodies to abut said bases and be clamped by forcible bending of said tongues into contact with the surface of the margins of the sheet.

5. Securing means for the edges of a sheet formed to provide a radio tuning dial cylinder comprising a strip of metal to underlie and extend along substantially the entire length of the opposed edges of the sheet when bent to cylindrical form and to prevent passage of light between said edges, a plurality of closely spaced tongues struck from the metal of the strip and projecting alternately in opposite directions from their bases, said bases in alignment and extending substantially perpendicular from the surface of the strip a distance substantially equal to the thickness of the sheet to provide shoulders against which the adjacent edges of the sheet may abut whereby to determine the alignment of said edges in parallelism to preserve an accurate cylindrical form for the cylinder, the bodies of said tongues overlying and forcibly pressed into clamping contact with the surface of said sheet to preserve the cylindrical form of the sheet.

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