My invention relates to radio reception and has for its principal object the provision of means for indicating to the operator of a radio receiver the hour at which a desired program is to be broadcast, as well as the station from which it may be received.

Operators of radio receiving sets have experienced considerable difficulty heretofore in keeping up with the programs broadcast by various stations throughout the hours of the day. Although complete radio programs for all stations are published daily in the press, it is apparent that such publications do not insure that a listener will hear all the programs in which he has a particular interest. It is necessary, for example, in operating a radio receiver with the published programs as a guide, to refer thereto at each change in the program and to scan the programs of all the stations within range. This process is obviously an annoyance and largely detracts from the pleasure afforded by broadcast programs.

I have perceived that it would be highly desirable to provide operators of radio reception outfits with means for selecting the programs they desire to listen to and for arranging the selected programs so that there will be no possibility of failure to tune-in on a particular station at the time when the desired program is to be broadcast. The invention described hereinafter performs this function admirably and is also characterized by additional features of novelty.

According to the invention, I provide a time scale on a suitable supporting panel. A station log is also provided on which the stations within receiving range may be listed. Indicating means adapted to be removably associated with the time scale are identified with the stations in the log as, for example, by a color code. It is thus possible for a listener to examine the published programs, select those which he desires to hear, and place his indicating means on the time scale accordingly. This done, the listener is prepared to receive the selected programs by referring to the scale which instantly discloses the time at which a desired program may be received, as well as the station from which it is broadcast.

The invention also contemplates means for receiving the indicating means after a program has been produced so that it will be readily available the next time the same program is broadcast. This feature is particularly desirable since many of the best programs are repetitive and are generally broadcast at the same day and hour each week.

For a complete understanding of the invention, reference is made to the accompanying drawings illustrating preferred embodiments thereof. In the drawings,

Figure 1 is a front elevation of a preferred form of the invention;

Figure 2 is a central section taken through Figure 1 along the plane of line II—II;

Figures 3 and 4 are also sectional views taken along the lines III—III and IV—IV, respectively, of Figure 1;

Figure 5 is a front elevation of a modified form of the invention;

Figure 6 is a central sectional view thereof taken along the line VI—VI of Figure 5; and

Figure 7 is a partial top plan view of the modified form shown in Figure 5.

Referring to the drawings and, in particular, to Figures 1 through 4, the preferred form of the invention comprises a panel 10 which may be of wood suitably finished to harmonize with a radio cabinet. On the front face of the panel 10, a chart 11 is secured.

The chart 11 comprises a scale 12 and two series of pockets 13 and 14 for receiving indicating means corresponding to repetitive programs. The time scale 12 has an inner circle 15 and an outer circle 16. The scale carries 12 numbered hourly divisions which are sub-divided into half and quarter hours. The inner circle 15 may be employed for the hours between midnight and noon, while the outer circle is preferably reserved for the hours between noon and midnight. The inner and outer circles 15 and 16 may be colored to indicate the hours represented thereby. The midnight to daybreak hours may suitably be represented by a light purple band; the daybreak to noon hours by a yellow band;
the noon to dark hours by a blue band; and the dark to midnight hours by a dark purple band. Thus the time scale 12 provides a graphic representation of the hours of the day with which suitable indicating means may be associated for showing at a glance what programs may be received at the various hours.

In the preferred embodiment of the invention, the indicating means take the form of small tabs 17. The function of these tabs is to indicate the hour at which a certain program is to be given, as well as the station from which it may be received. The hour of the program is, of course, indicated by the position of the tab with respect to the time scale. A variety of means may be employed for indicating the station from which the program comes, but I prefer to employ tabs of different colors identified with the different stations by means of a log 18 carrying a table 19 listing the various stations and showing the color of the tabs used to indicate programs broadcast therefrom. As is apparent from Figure 1, the table 19 is provided with a column for the call letters of the various stations and a small circle colored according to the code adopted. Additional columns are provided for the dial settings at which the various stations are received and the broadcasting frequencies.

The log 18 comprises a card or board of suitable thickness having its side edges tapering downwardly. This shape makes it easy to insert the log in a receiving pocket 20 in the back of the panel 10. As shown in Figure 1, the log is partially withdrawn from its pocket. A plurality of holes 17a are formed in the upper edge of the panel for carrying a supply of tabs of different colors. The tabs may be used blank or they may be lettered with the title of the particular program. The latter procedure is desirable in the case of programs repeated weekly; the former in the case of special programs that are given but once.

The reverse side of the tabs will be found exceedingly useful for receiving additional data. If a program is repeated several days of the week, the days on which it is given may be written on the back of the tab. If a special artist or speaker is to be heard on a particular program, his name may be noted. Since these data are for temporary use, they may be written in pencil and erased after the conclusion of the program. It may also be desired to note on the back of the tab the length of the program.

In order to facilitate handling of the tabs corresponding to weekly programs, the receivers 13 and 14 are provided. These receivers have a plurality of tab pockets 21 which may be divided by permanent markings among the days of the week. Preferably the sets of pockets 21 are each divided into four equal divisions. This provides ample space for each day of the week and an additional “waiting” space for programs, the hours of which are to be changed, and for occasional or special programs. As an alternative, movable division tabs 22 may be used to provide a certain flexibility in the amount of space assigned to each day. The insertion of the tabs 17 under the edge of the time scale 12 is made easy by the provision of recesses 23 in the backing of the chart 11. A covering sheet overlies these recesses and the scale proper is a circular strip secured to the panel by tabs 24 leaving the edges free for receiving the ends of the tabs which project into the recesses 23. Insertion and removal of the tabs may be further facilitated by dishing the edges of the scale upwardly and forming circular beads in the panel face, spaced inside and outside the time scale. The dished edges make it easy to insert the tabs and the beads cause the ends of the tabs to stand out from the panel face for easy observation and removal. The pockets 21 are formed by folds in a continuous strip of heavy paper or fibre secured to the panel by tabs 25. The panel 10 may have rearwardly extending brackets 26, as shown in Figure 2, to enable it to stand in any desired location. Rubber feet should be provided to prevent marring the supporting surfaces. The brackets 26 may be secured and the panel 10 hung from any suitable suspension.

This feature also permits several tabs to be inserted under the edge of the scale at a single time-indicating position. The tabs should, of course, be fanned for easy observation. Thus if the user has an interest in several programs to be given simultaneously, he is reminded to try all of them at the proper time when making his final selection.

The method of using the device described hereinabove will probably be obvious from what has already been said. The user may select from published tables the programs he wishes to hear and, by placing the indicator tabs accordingly, he is provided with a chart of the desired programs. By changing the tuning of the radio receiver according to the dial settings shown by the log at the hours indicated by the position of the tabs of corresponding color, he may be certain of hearing all the programs which he has selected on a certain day. After the programs have concluded, the indicating tabs corresponding thereto may be removed from the time scale and placed in the proper division of the receiving pockets 13 and 14 for use on the same day of the following week if the program is repeated weekly. Otherwise the tab may be placed in the hole 21 carrying other tabs of the same color.

Referring to Figures 5 through 7, showing a slightly modified form of the invention, a panel 30 is provided with a chart 31 similar...
to that shown at 11 which is carried by the panel 10. On the chart 31, a time scale 32 is arranged having inner and outer circles for morning and evening hours. Two series of small holes 33 are formed in the panel just inside and just outside of the time scale 32. Indicating tabs 34 may be secured in position about the time scale by means of pins 35 which project through the tabs and into the holes 33. The pins 35 may have their heads colored to correspond with the colors of the tabs 34. The tabs, of course, are colored according to the code to indicate the station which is to be tuned-in at the hour indicated by the position of the tab.

Figure 7 illustrates a device for perforating the tabs. This device includes a sheet metal strip 45 secured to the upper edge of the panel. The strip 45 is provided with hole 46 and a tapering recess 47 is formed in the panel under the strip. By inserting a tab into the recess, as shown in Figure 7, the letter or number assigned to the various days of the week through the hole 46. The hole is also drilled into the panel under the strip 45 so that the perforating pin may pass entirely through the tab. A plurality of holes 48 may be located behind the holes 39 for receiving a pin and its tab when the latter are removed from the time scale at the conclusion of a program. The tabs may thus be filed with their pins in the holes 48 or without the pins in the pockets 37 for use the following week.

The foregoing description will serve to emphasize the novel features and advantages which are obtained by the invention. It affords radio listeners a clear and unmistakable guide as to the stations broadcasting desired programs at the different hours of the day. The programs themselves may, furthermore, be identified by suitable inscription on the indicating tabs. The tabs referring to weekly programs may be set aside in divisions of a week's time, so that the station and the hour will be instantly brought to mind by a casual reference to the chart.

Although I have illustrated and described but two modifications of the invention, it is obvious that the construction may be otherwise altered in numerous details. All such changes, however, may be made without departing from the spirit of the invention or the scope of the appended claims since I do not intend to be limited by the specific constructions described and illustrated.

Adjoining each side of the panel, a recess 36 is formed in which the receiving pockets 37 for the indicator tabs for weekly programs are located. Hinged doors 38 may be swung shut on hinges 38a to cover the recesses 36. The station color code, dial settings, and frequencies may be inscribed upon the outer face of the doors 38. Holes 39 in the upper edge of the panel 30 provide receivers for the pins and the tabs.

In order to simplify the tuning of the receiver in accordance with the settings of the chart, a watch 40 is fitted into a recess 41 formed at the center of the panel 30. The watch is hung from a block 42 which project into the recess 41 and is hinged to the back of the panel by a hinge 43. A button 44 locks the block 42 in position.

Instead of employing the combination of pins and tabs, I may use the pins alone. The use of the tabs in combination with the pins, however, has the advantage that the name of the program or its sponsor may be inscribed thereon.

I claim:
1. In a program indicating device, a time scale, program indicators, and a watch for identifying the stations represented by the indicators, and a file having divisions for the days of the week for receiving indicators corresponding to repetitive programs when not in use.
2. In a program indicating device, detachable indicators therefor corresponding to programs repeated on the same day each week, and a file for receiving indicators corresponding to programs repeated weekly, in groups for each day of the week.
3. A program indicator comprising a panel, an annular clock ring thereon, graduated similarly to a clock dial, and means for receiving indicating tabs at both the inner and outer edges of said ring.
4. An indicator device for radio reception comprising a station log, an annular time scale, indicators identified with the stations in the log, means whereby said indicators may be positioned adjustably relative to said scale on both the inside and outside edges thereof.
5. In a radio reception device, a panel, an annular clock ring thereon, and means for holding indicating markers adjustably on both the inside and outside thereof, said markers being colored to represent the station broadcasting the indicated program, and a color code disclosing the station represented by a particular color.
6. A program indicator for radio reception, comprising a panel, an annular dial secured thereto, a plurality of indicators identified with certain broadcasting stations and...
selected programs receivable therefrom, and cooperating means on the panel and dial for holding said indicators in time-indicating relation to said dial on the inside and outside of the latter.

7. A radio program indicator comprising an annular clock ring having twelve hourly divisions, a panel for supporting said scale, means for holding indicators in time-indicating relation to said scale on both the inside and outside thereof to indicate at least the hours from morning until midnight, and means for identifying said indicators with selected broadcasting stations and displaying the dial setting corresponding thereto.

8. A radio program indicator comprising an annular time scale, and means attachable to both the inside and outside of said scale in time-indicating relation thereto for indicating the time of broadcasting of a selected program and the station broadcasting it.

9. A radio program indicator comprising a clock ring, adjustable time-indicating means adapted to cooperate with either the inside or outside of the ring, and means associated with the indicating means for identifying a broadcasting station and its dial setting.

10. A radio program announcer comprising an annular dial, and adjustable time-indicating means adapted to be placed on the inside or outside of said dial, for showing the station broadcasting a selected program and the hour of broadcasting.

11. A program indicator comprising a panel having an annular time scale thereon, and recesses in said panel on the inside and outside of said scale for receiving time-indicating tabs.

12. A program indicator comprising a panel, and a clock ring thereon having graduations similar to those of a clock dial, the ring being mounted on the panel with portions of its inner and outer edges free to receive indicating tabs and support them in time-indicating relation for easy observation and removal.

13. In a program indicating device, the combination with a supporting panel, an annular time scale thereon having at least portions of both of its edges free for the introduction of indicating markers thereunder.

14. A program announcer comprising a panel, an annular time scale thereon having portions of both its edges free, and indicating means insertable between the free edges of the scale and the face of the panel.

15. A program indicator comprising a clock ring mounted on a panel larger than the dial, and means for supporting indicating means within and without the ring in time-indicating relation thereto.

16. In a radio program indicator, the combination with a panel, an annular time scale secured thereon including a strip having a portion of both its edges spaced from the panel, of a plurality of indicating tabs receivable under the edge of the strip in one time-indicating position.

17. In a program indicator for showing the time and origin of daily radio programs, a panel and an annular scale thereon having portions of both its edges free to receive removable indicators showing hourly programs whereby each day's programs may be visibly and graphically displayed by properly positioning desired indicators relative to said scale.

18. The combination, in a radio program indicator, with a supporting panel, of a time scale thereon adapted to receive indicators for showing the time and origin of desired programs, and a file adjacent said scale for holding indicators corresponding to future programs, said file having divisions for the days of the week.

In testimony whereof I have hereunto set my hand.

GEORGE H. FOLLOWS
CERTIFICATE OF CORRECTION.

Patent No. 1,837,707. Granted December 22, 1931, to

GEORGE H. FOLLOWS.

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction as follows: Page 3, line 68, beginning with the word "Adjacent" strike out all to and including the word "thereon" in line 91; same page, after line 15, insert the following:

Adjacent each side of the panel, a recess 36 is formed in which the receiving pockets 37 for the indicator tabs for weekly programs are located. Hinged doors 38 may be swung shut on hinges 38a to cover the recesses 36. The station color code, dial settings, and frequencies may be inscribed upon the outer face of the doors 38. Holes 39 in the upper edge of the panel 30 provide receivers for the pins and the tabs.

In order to simplify the tuning of the receiver in accordance with the settings of the chart, a watch 40 is fitted into a recess 41 formed at the center of the panel 30. The watch is hung from a block 42 which projects into the recess 41 and is hinged to the back of the panel by a hinge 43. A button 44 locks the block 42 in position.

Instead of employing the combination of pins and tabs, I may use the pins alone. The use of the tabs in combination with the pins, however, has the advantage that the name of the program or its sponsor may be inscribed thereon;

and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 23rd day of February, A. D. 1932.

M. J. Moore,
Acting Commissioner of Patents.

(Seal)