

Right now things are mildly teeming in piano tuning circles for from France has come a new method of tuning by tenths. This new method appeared in a report by Jean de Bremaeker in *Musique et Instruments*. *The Journal of the Acoustical Society of America* has just published an abstract in English.

Like all methods of piano tuning, the Bremaeker method achieves its results by putting the piano out of tune and then gradually comparing beat notes until correct register of tone is accomplished.

But the new method does this by spreading the work out over about a third of the piano keyboard while the current methods utilize only a single octave, if possible, for this original "laying the bearings" as the piano tuners call it.

A claim for the Bremaeker system is that all octaves are true octaves and not distorted as in current methods. Mr. Bremaeker insists that the "stretching" of octaves in the upper and lower registers is a "barbarous practice" whereby brilliant music is obtained at the expense of pathetic.

William Braid White, acoustical con-

sultant of Chicago, and Doctor of Music has tried out the new method and informs Science Service that it is in no way better suited to give results more

accurate than are reached by the best of American tuners. With this lack of superiority comes a great increase in the complexity of an already complex job.

Science News Letter, November 12, 1938

PHYSICS

Scientists Seek to Simplify World's 2,000 Color Names

SCIENCE is nearing the end of its task of trying to set up a few simple names for colors which will bring order out of the more than 2,000 designations which colors now have.

In a report to the Optical Society of America, Dr. Deane B. Judd, of the National Bureau of Standards, disclosed that only a few revisions remain in the task of finding 320 designations for all colors.

Actually only a few names are needed in the system devised by the Inter-Society Color Council. Eight adjectives—strong and weak, light and dark, and pale, deep, dusky and brilliant—are applied to each hue name to make up the total of 320.

The agreed upon names are: pink, red, orange-pink, red-orange, red-brown, orange, brown, yellow-orange, yellow-brown, yellow, olive-brown, olive, yellow-green, green-olive, green, blue-green, blue, purple-blue, purple, purple-pink, red-purple. And in addition, white, grey and black.

The scientific classification of colors, Dr. Judd said, was undertaken at the request of the American Pharmaceutical Association to simplify the color designation of drugs and chemicals.

In its broadest aspects the new system of simplified colors could be applied to all fields of activity where colors are used.

However, scientists realize that manufacturers might be averse to putting out a color known as a "weak" pink or a "weak" blue, even if it is scientifically accurate. Thus Twilight Mauve, Titian Tan, Patio Blue and the other new fall shades will probably be around for awhile.

Artificial Daylight Studied

A two-year study on artificial illumination in the color grading of cotton and other farm produce, shows that the extreme intense light previously suggested is not necessary.

Ninety footcandles has been the mini-

mum illumination recommended. But checks at the various stations of the U. S. Department of Agriculture show that 45 footcandles is sufficient in most cases, reported Dorothy Nickerson of the U. S. Bureau of Agricultural Economics. Only on dark overcast days in December was an illumination of more than 100 footcandles required.

The search for proper standards for artificial daylight was described in another paper by Dr. Deane B. Judd of the National Bureau of Standards. A correct light simulating daylight must preserve color differences.

That is, if one of two samples appears just noticeably redder than the other in daylight it should also appear just noticeably redder under the artificial rays.

Science News Letter, November 12, 1938

When the Menai Bridge was built in Wales over 100 years ago, it was a wonder of its age; now it is being reconstructed for heavy traffic.

● Earth Trembles

Information collected by Science Service from seismological observatories and relayed to the Jesuit Seismological Association resulted in the location of the following preliminary epicenter:

Saturday, Nov. 5, 5:43.3 p. m., Japan Time. On Japanese coast, about 150 miles northeast of Tokyo. Latitude 38 degrees north, longitude 140.7 degrees east.


For stations cooperating with Science Service in reporting earthquakes recorded on their seismographs see SNL August 13.

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