PS Reader Makes Own TV Color

While experts haggled over how difficult it was to put color television into an ordinary set, a Popular Science reader went ahead and did it. Total cost: 30 cents.

Forrest W. Killy, a young electrician of Roselle, N. J., thought it would be fun to peek while the Columbia Broadcasting System broadcast color-television tests. So he picked a phonograph motor, condenser, switch, and rheostat from his junk box and spent the 30 cents for some red, blue, and green cellophane. He cut the cellophane into wedges and pasted them on cardboard and wire to make a color wheel. The phonograph motor, its speed controlled by the rheostat, spins the wheel. The condenser and switch, wired into the horizontal sweep circuit of Killy's standard black-and-white TV receiver, change the picture from the 325-line basis ordinarily used to the 405 lines of Columbia's color system. (This line conversion, simple on the particular model Killy has, would be complicated on others.)

Upon spotting a color telecast (until recently tests were transmitted at irregular "off" hours), Killy slid the color wheel in front of his set, plugged the motor in, and switched the set to the 405-line color scan. The rheostat must be adjusted until the color wheel rotates exactly in time with the color wheel in the studio camera. This is a little tricky with Killy's rig—the colors may change back and forth until the adjustment is just right. Yet Killy's simple converter can show the colors quite accurately. And so far as CBS knows, he has been the only private citizen in the country to see even that much color on his own set.