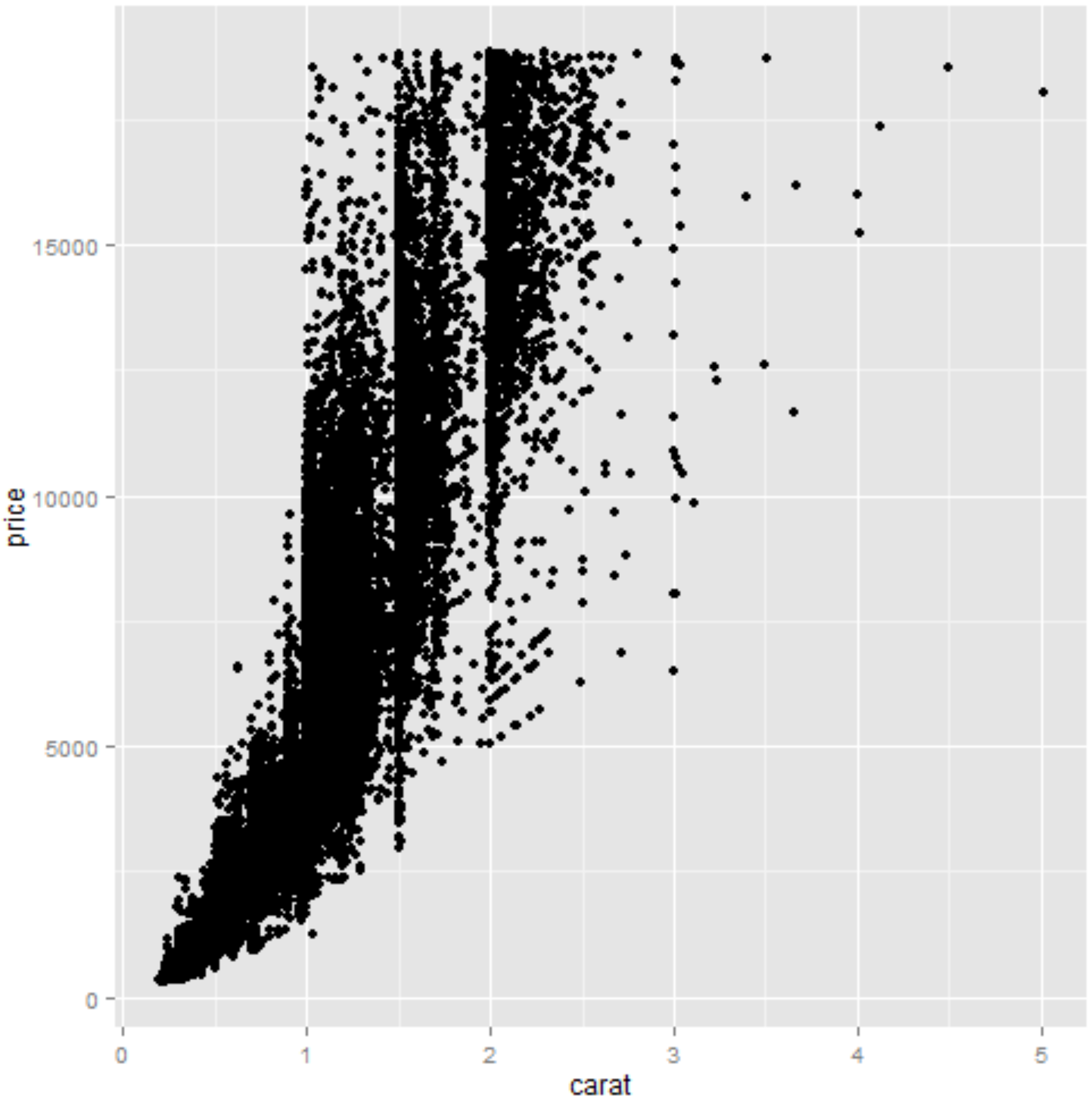
```
require(ggplot2)
```

```
## Loading required package: ggplot2
```

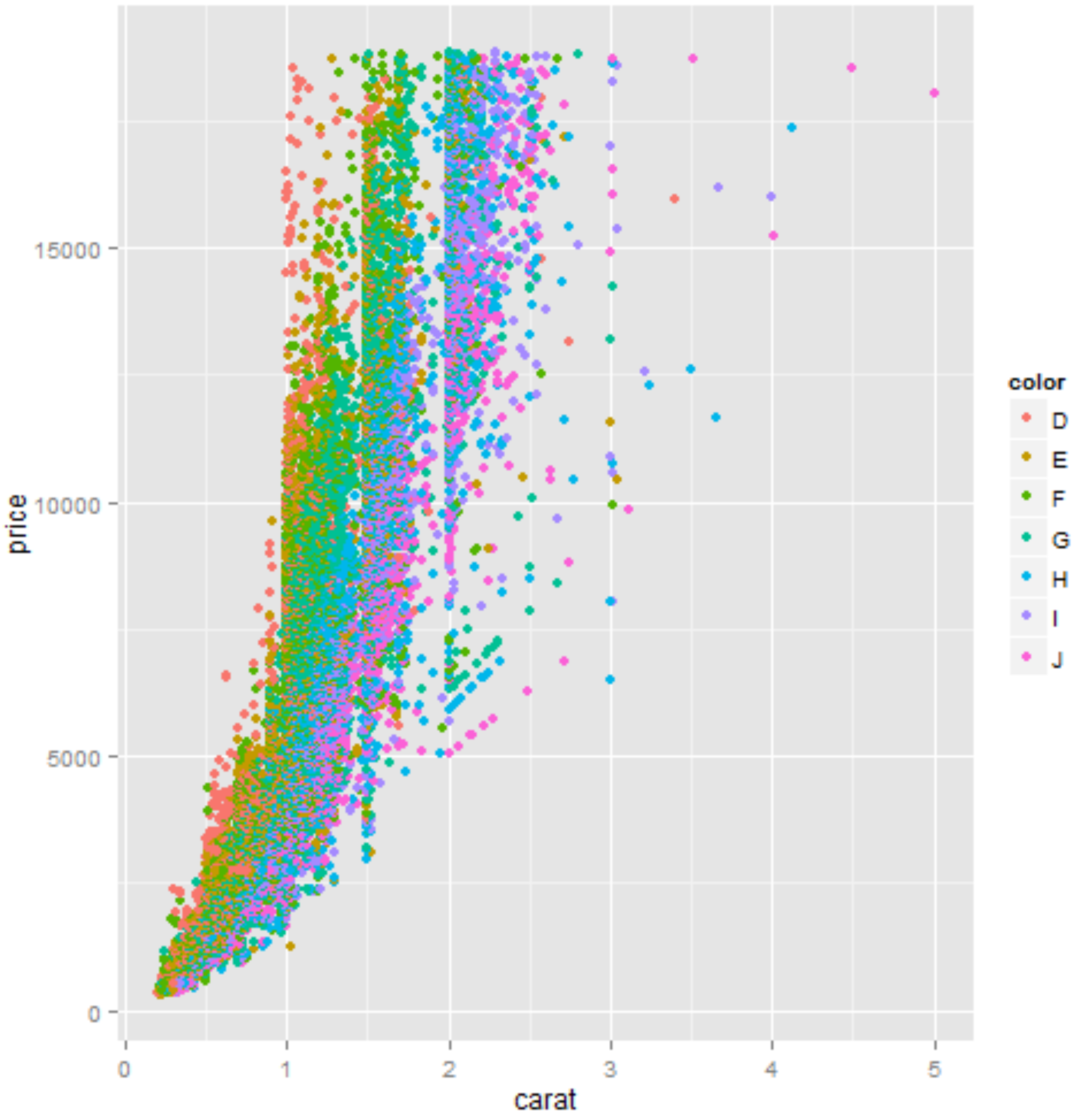
```
data(diamonds)
head(diamonds)
```

```
##   carat       cut color clarity depth table price    x    y    z
## 1  0.23     Ideal     E     SI2  61.5    55   326 3.95 3.98 2.43
## 2  0.21   Premium     E     SI1  59.8    61   326 3.89 3.84 2.31
## 3  0.23      Good     E     VS1  56.9    65   327 4.05 4.07 2.31
## 4  0.29   Premium     I     VS2  62.4    58   334 4.20 4.23 2.63
## 5  0.31      Good     J     SI2  63.3    58   335 4.34 4.35 2.75
## 6  0.24 Very Good     J    VVS2  62.8    57   336 3.94 3.96 2.48
```

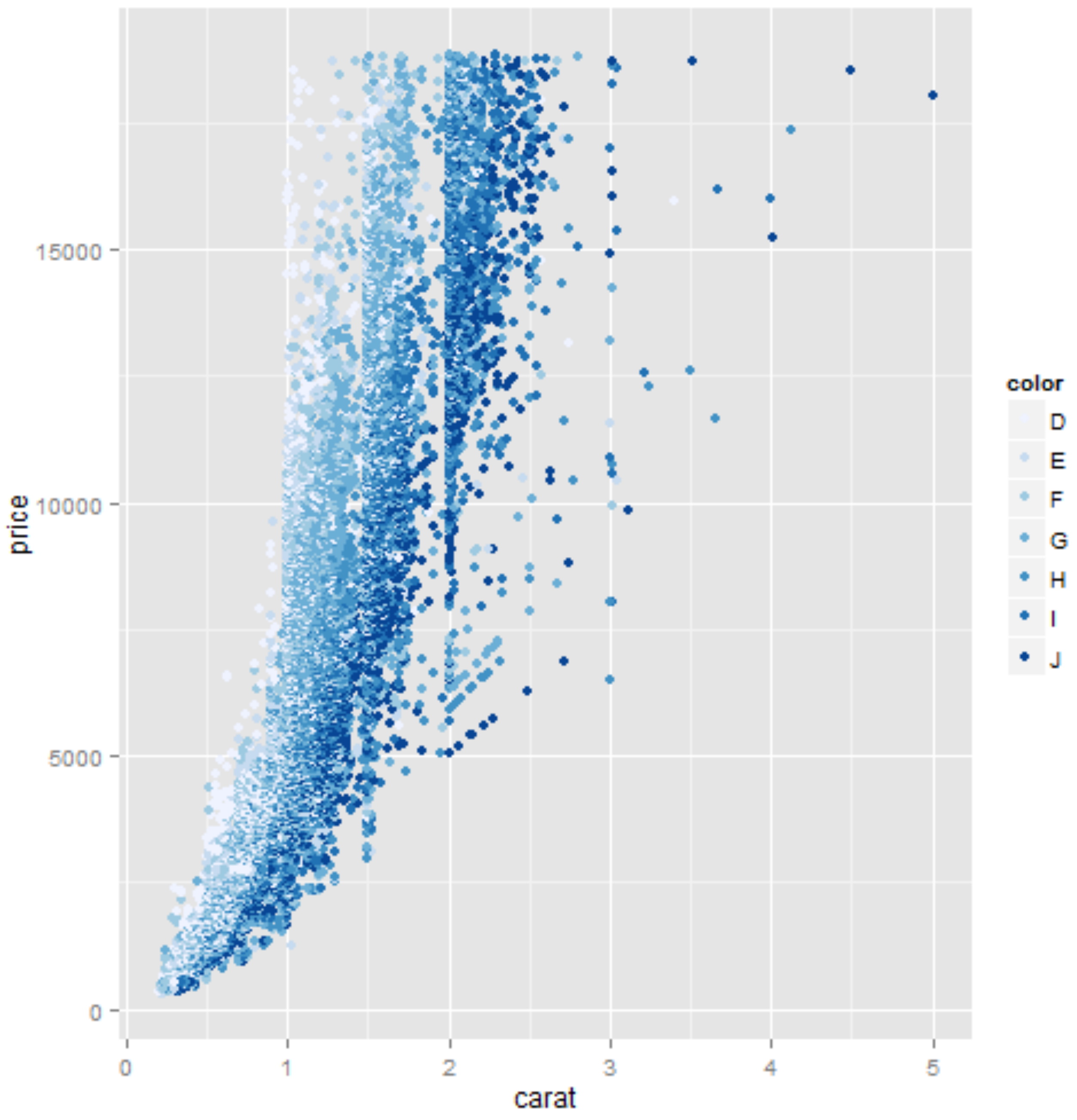
```
ggplot(diamonds) + geom_point(aes(x = carat, y = price))
```



```
g <- ggplot(diamonds) + geom_point(aes(x = carat, y = price, color
= color))
g
```



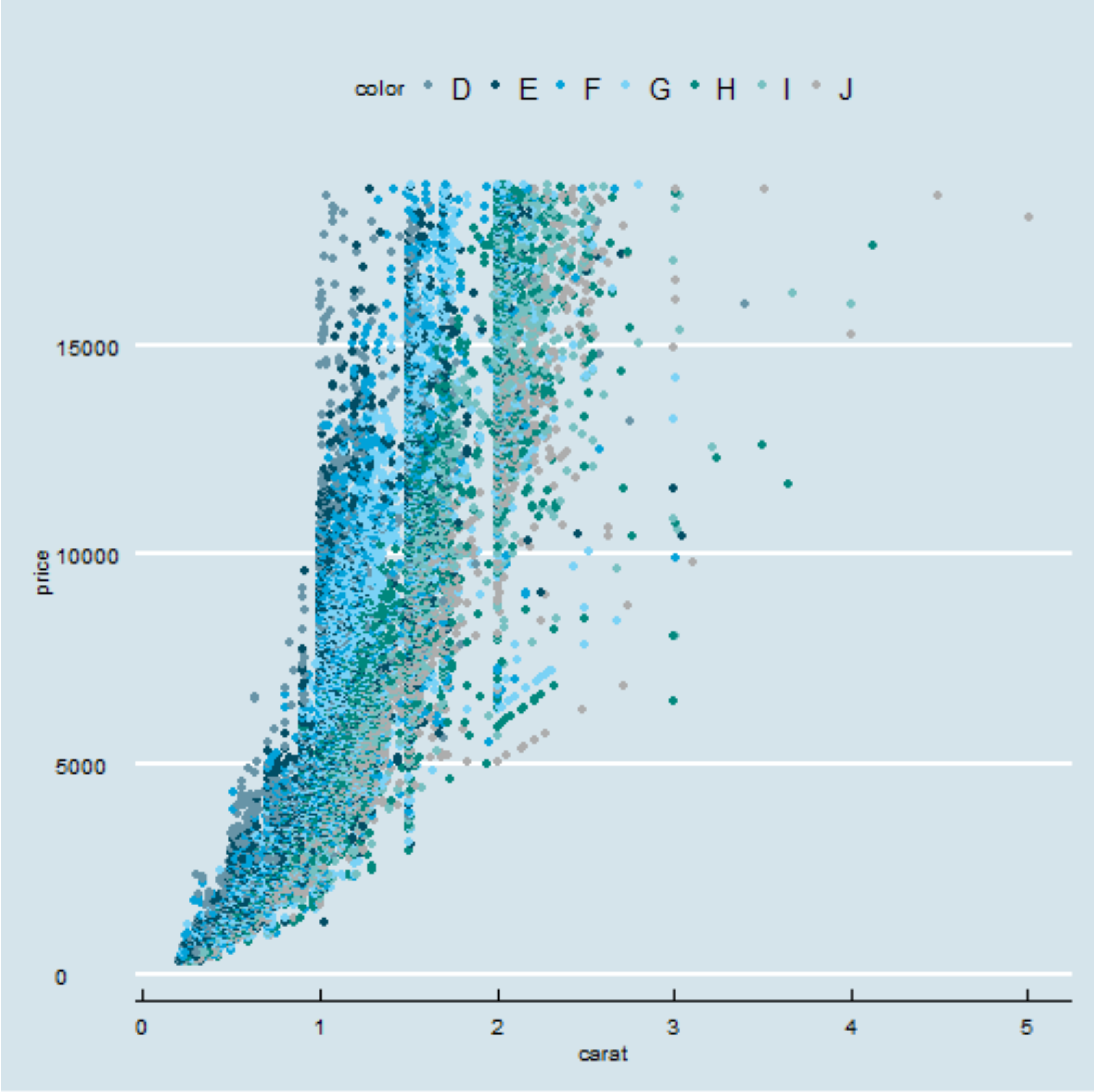
```
g + scale_color_brewer()
```



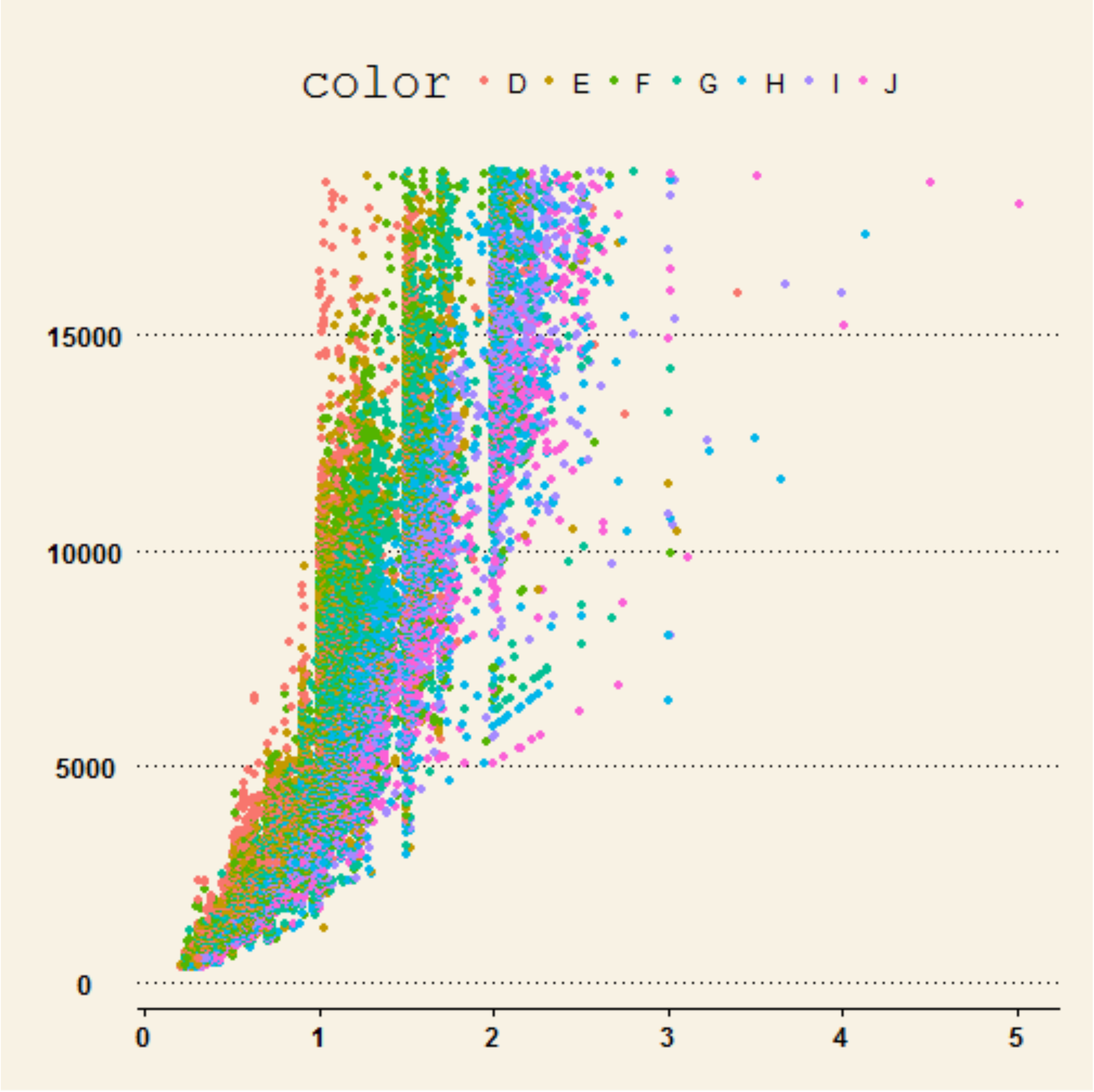
```
require(ggthemes)
```

```
## Loading required package: ggthemes
```

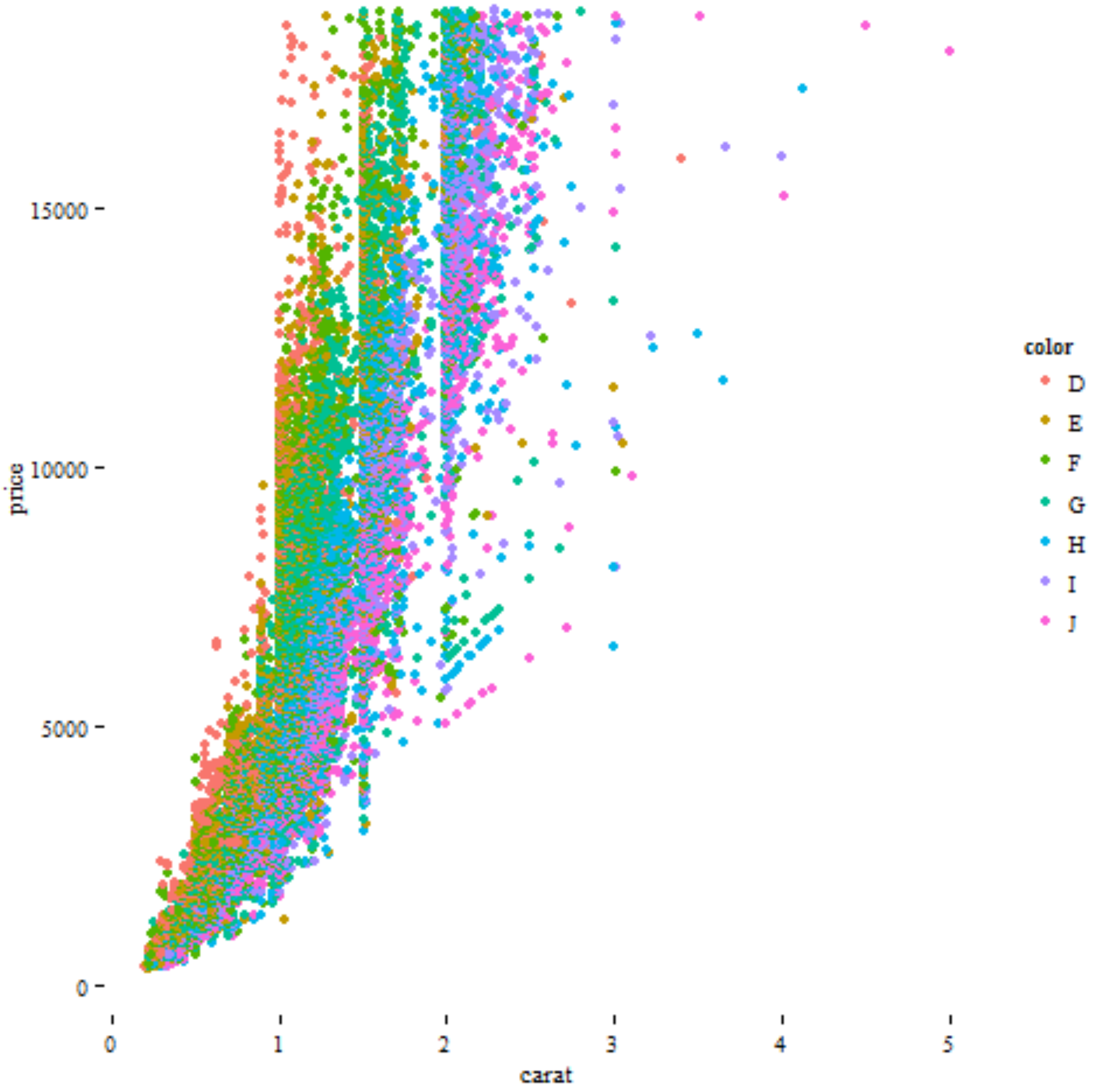
```
g + theme_economist() + scale_color_economist()
```



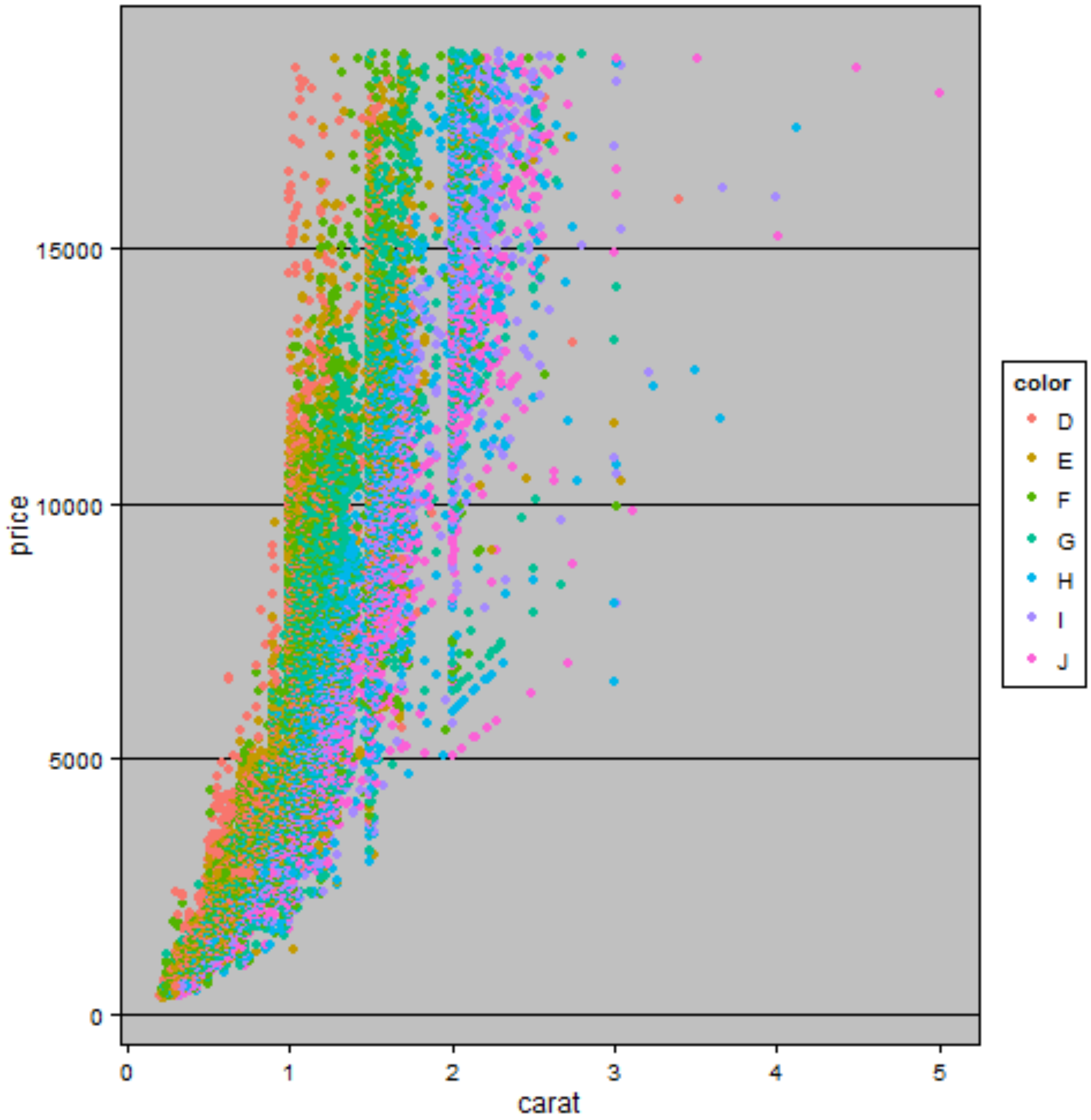
```
g + theme_wsj()
```



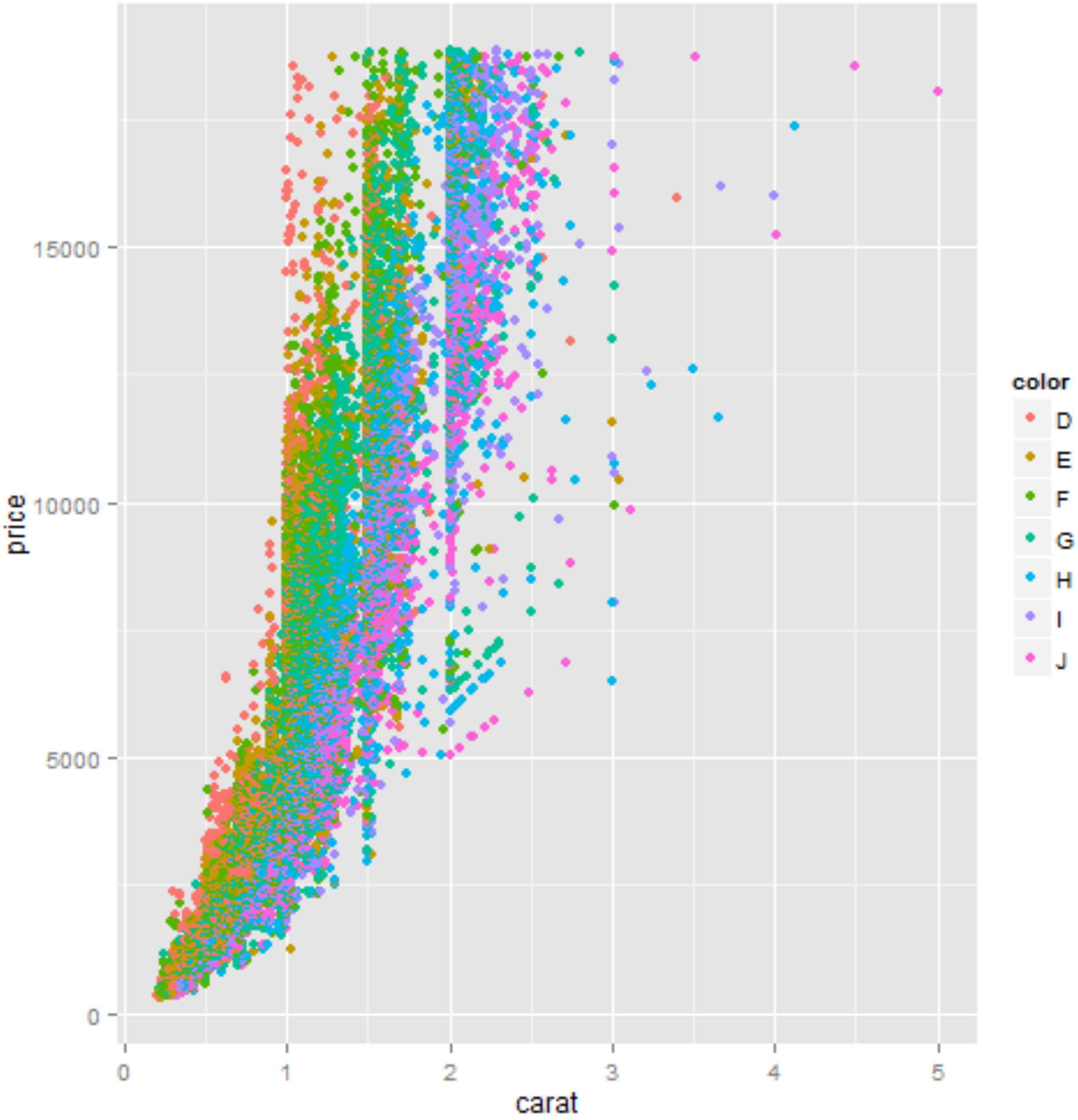
```
g + theme_tufte()
```



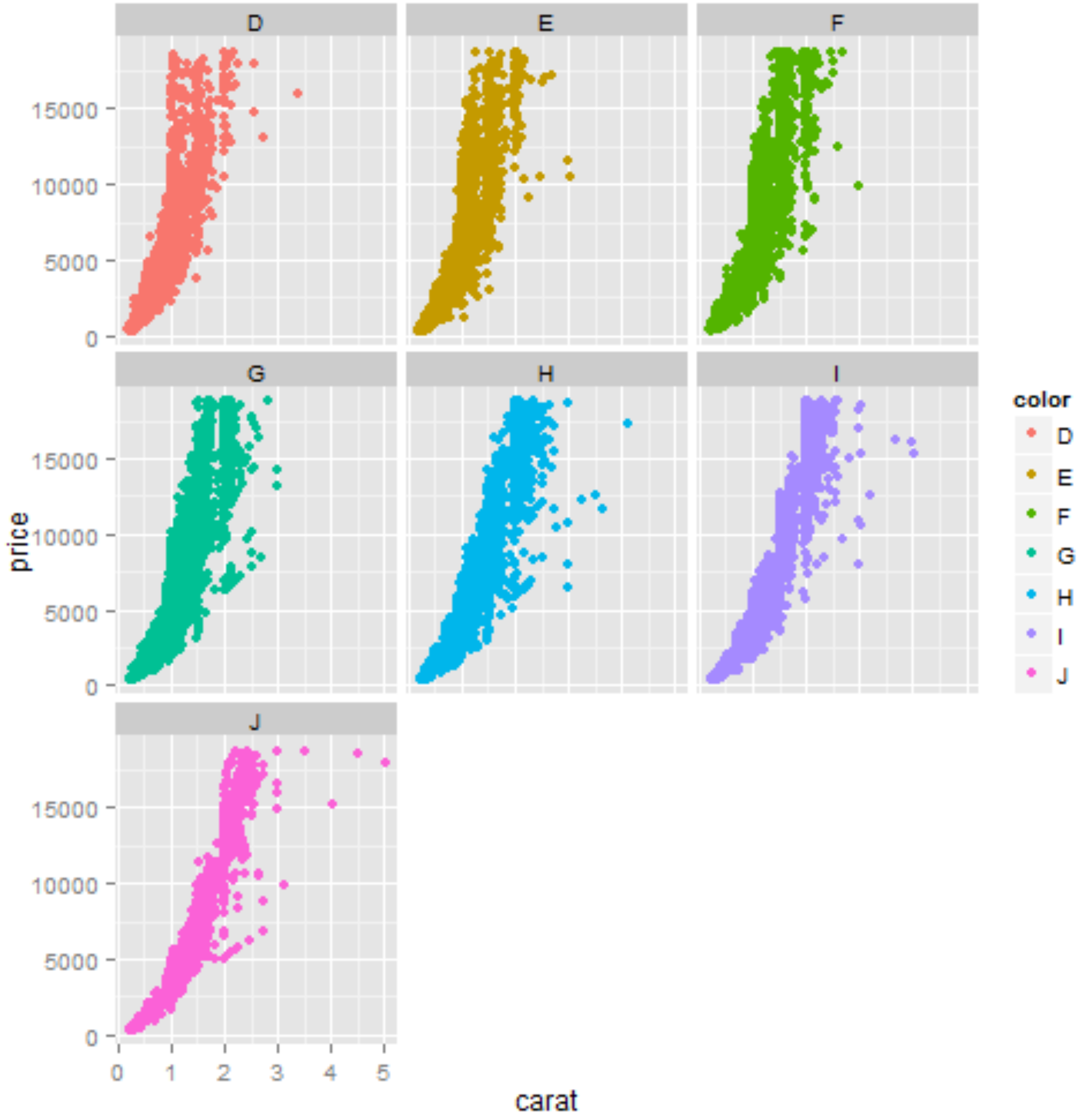
```
g + theme_excel()
```



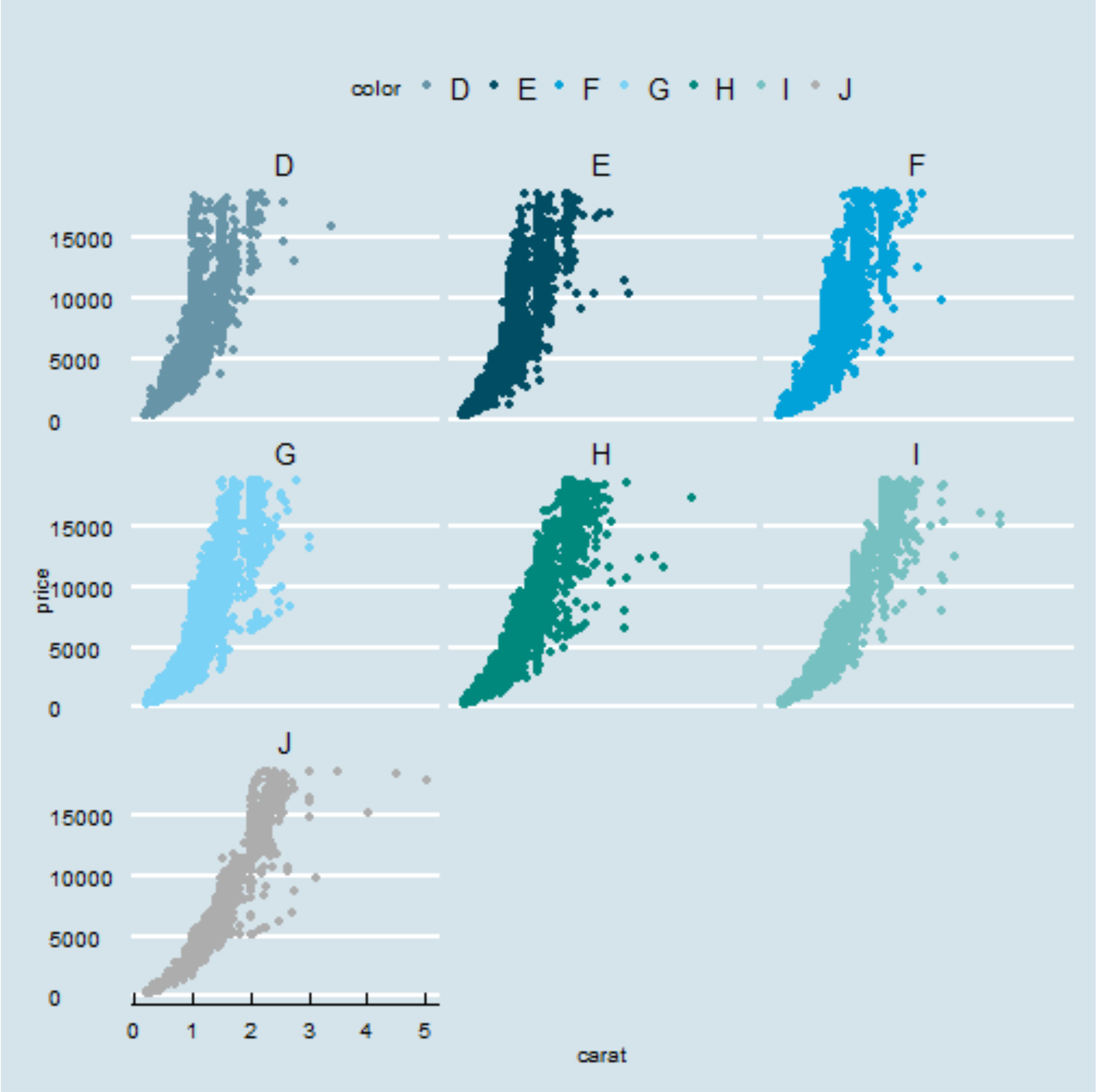
```
g
```



```
g + facet_wrap(~color)
```



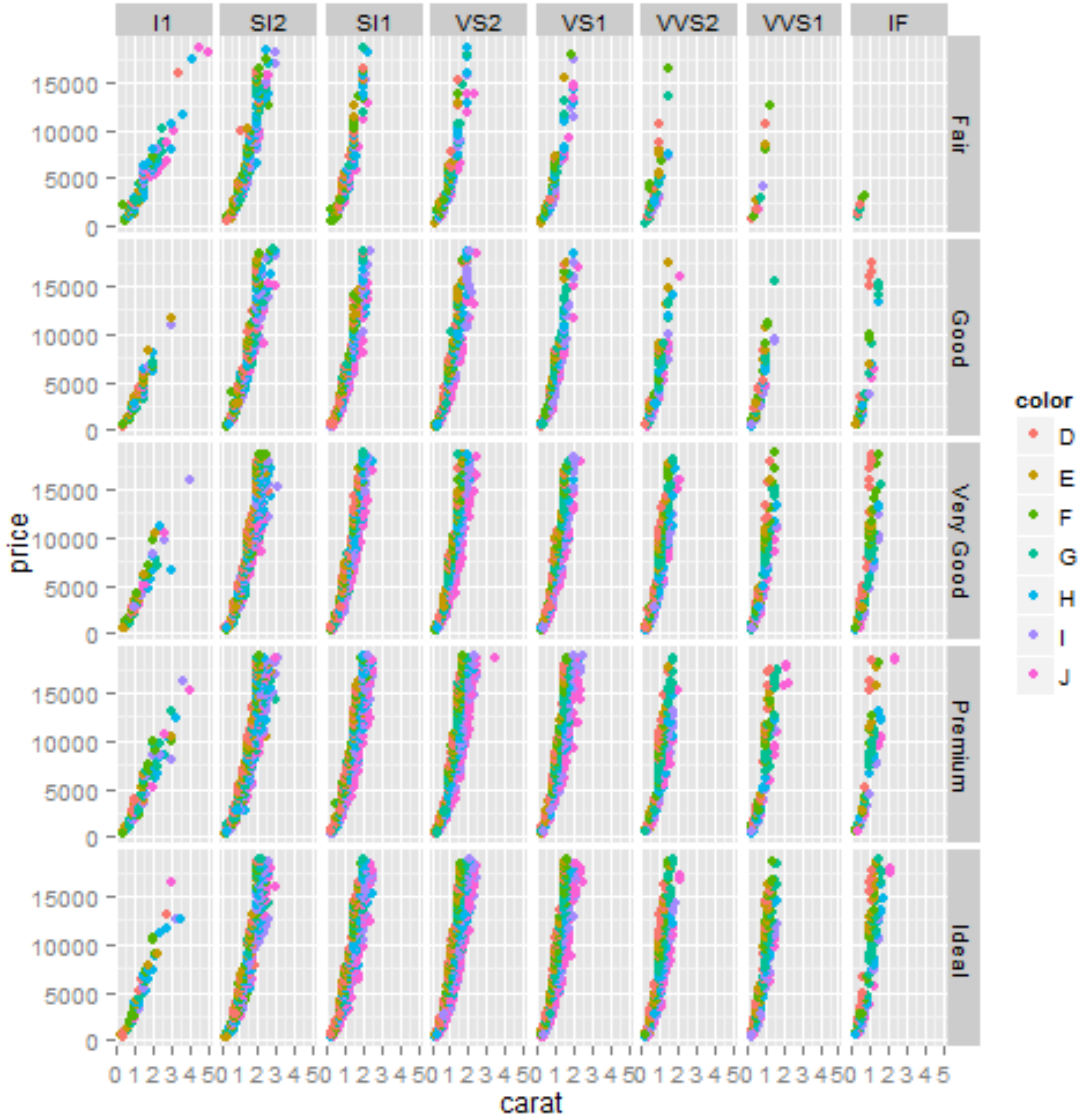
```
g + facet_wrap(~color) + theme_economist() +
scale_color_economist()
```



```
head(diamonds)
```

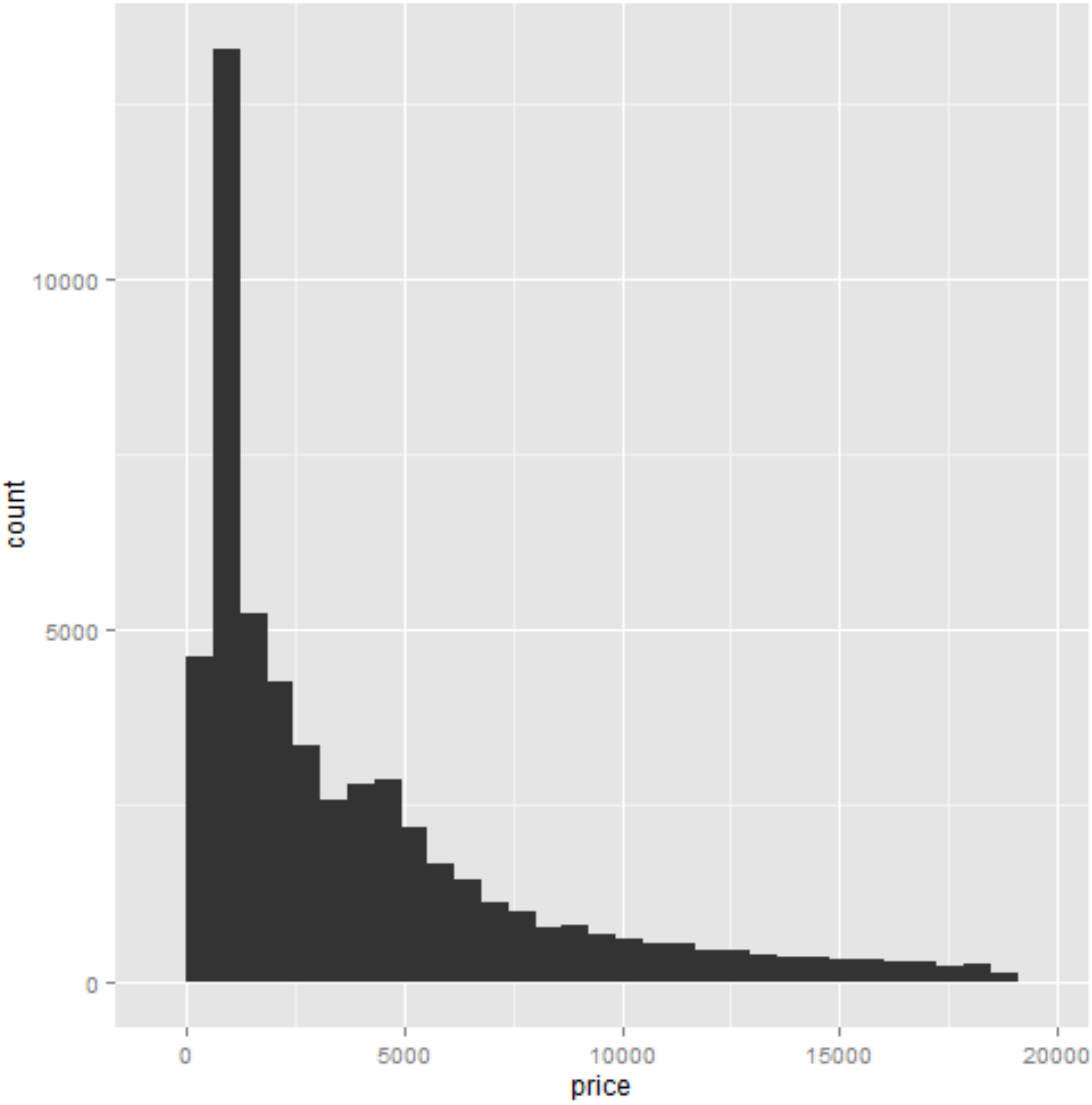
```
##   carat       cut color clarity depth table price    x    y    z
## 1  0.23     Ideal     E     SI2  61.5    55   326 3.95 3.98 2.43
## 2  0.21   Premium     E     SI1  59.8    61   326 3.89 3.84 2.31
## 3  0.23      Good     E     VS1  56.9    65   327 4.05 4.07 2.31
## 4  0.29   Premium     I     VS2  62.4    58   334 4.20 4.23 2.63
## 5  0.31      Good     J     SI2  63.3    58   335 4.34 4.35 2.75
## 6  0.24 Very Good     J    VVS2  62.8    57   336 3.94 3.96 2.48
```

```
g + facet_grid(cut ~ clarity)
```



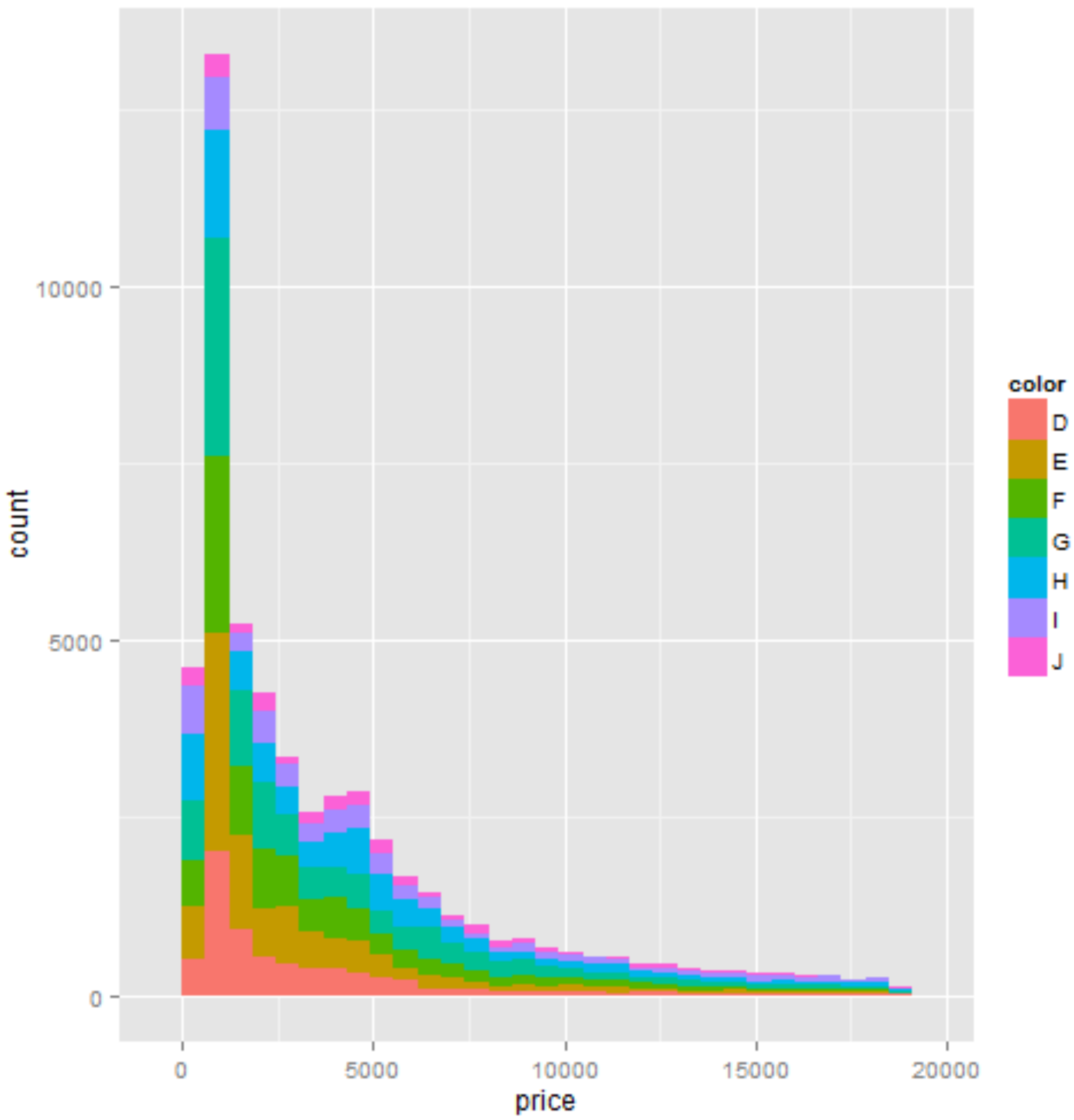
```
ggplot(diamonds, aes(x = price)) + geom_histogram()
```

```
## stat_bin: binwidth defaulted to range/30. Use 'binwidth = x' to
adjust this.
```



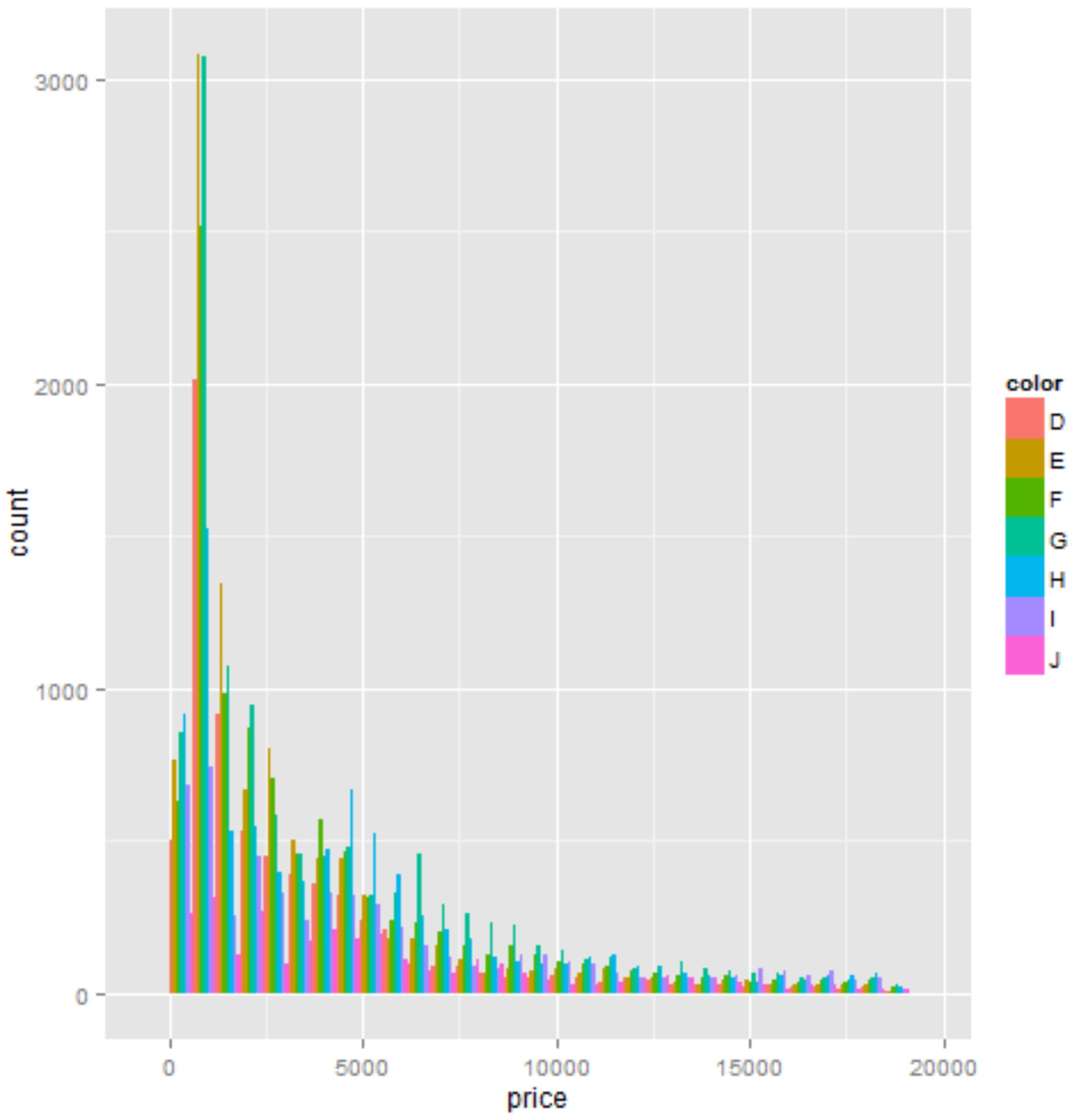
```
ggplot(diamonds, aes(x = price)) + geom_histogram(aes(fill =
color))
```

```
## stat_bin: binwidth defaulted to range/30. Use 'binwidth = x' to
adjust this.
```

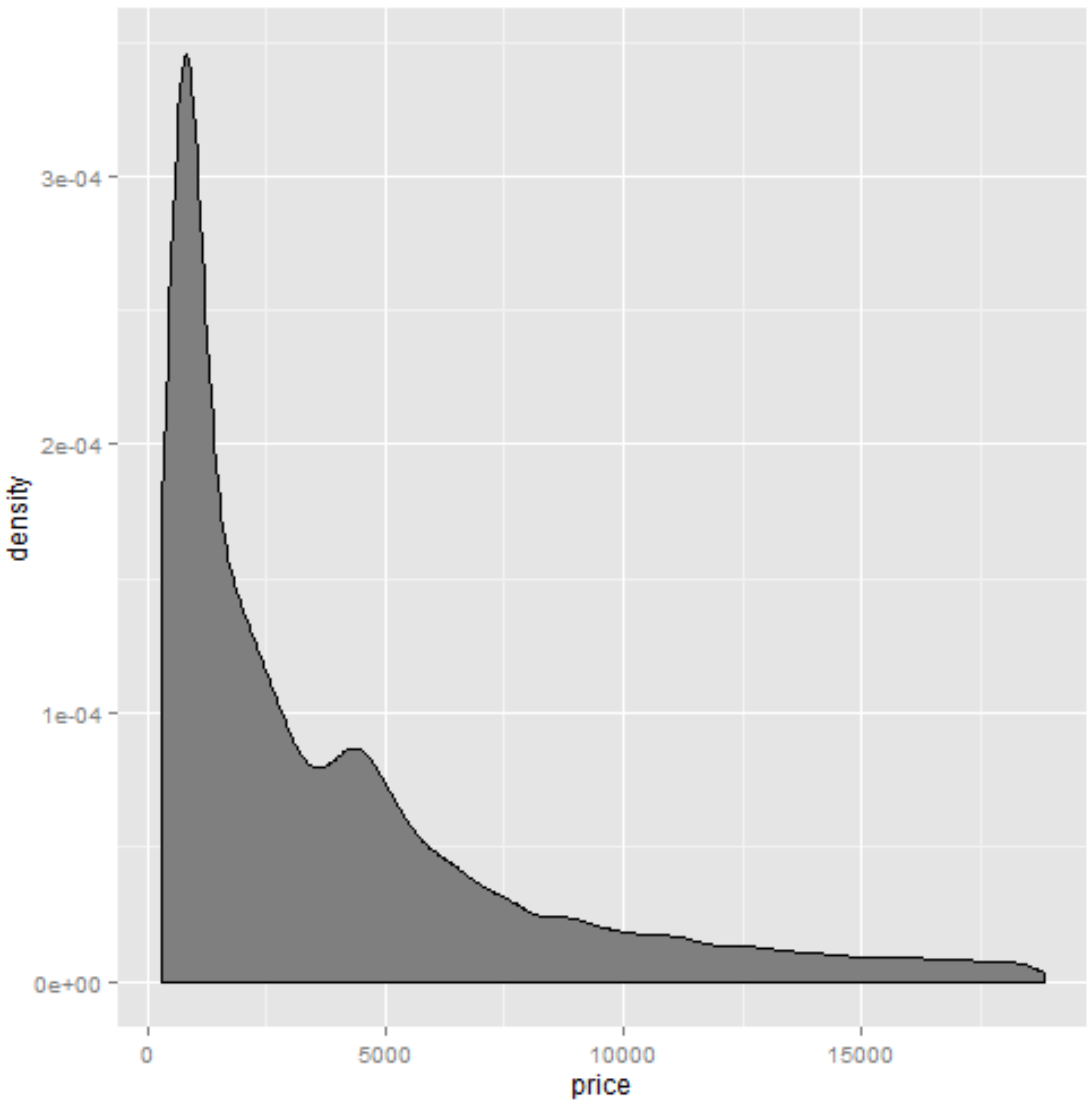


```
ggplot(diamonds, aes(x = price)) + geom_histogram(aes(fill =
color), position = position_dodge())
```

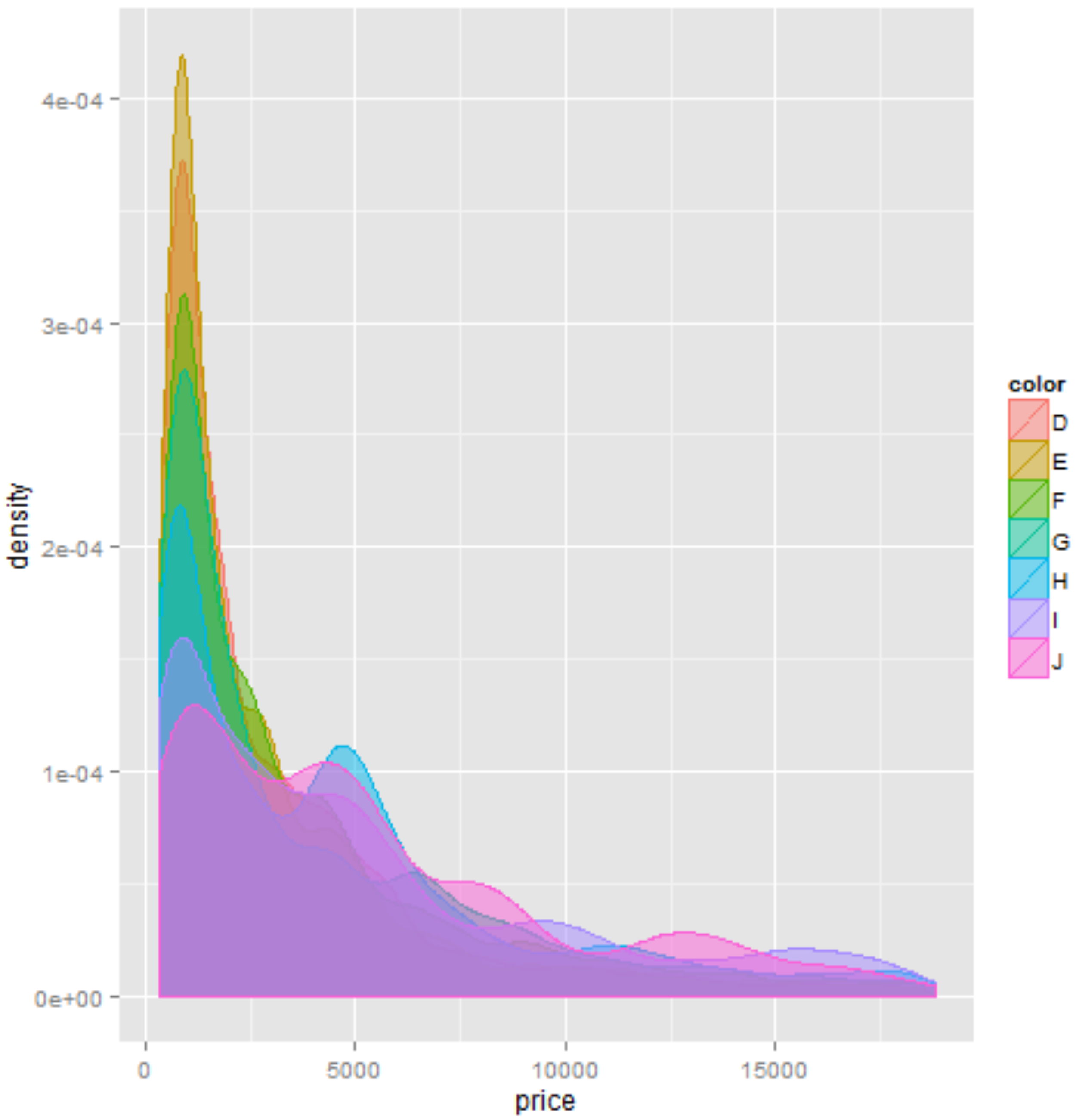
```
## stat_bin: binwidth defaulted to range/30. Use 'binwidth = x' to
adjust this.
```



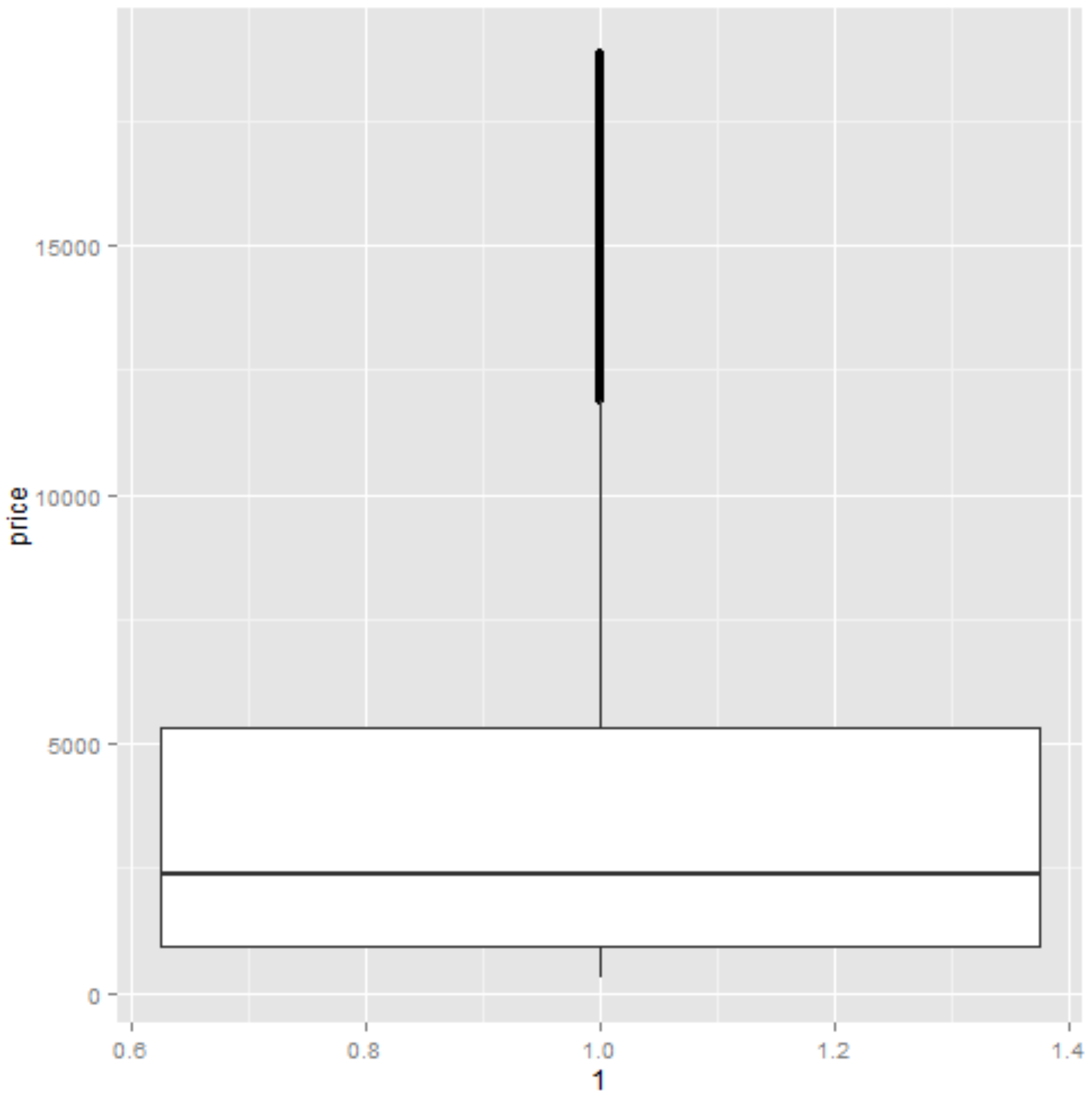
```
ggplot(diamonds, aes(x = price)) + geom_density(fill = "grey50")
```



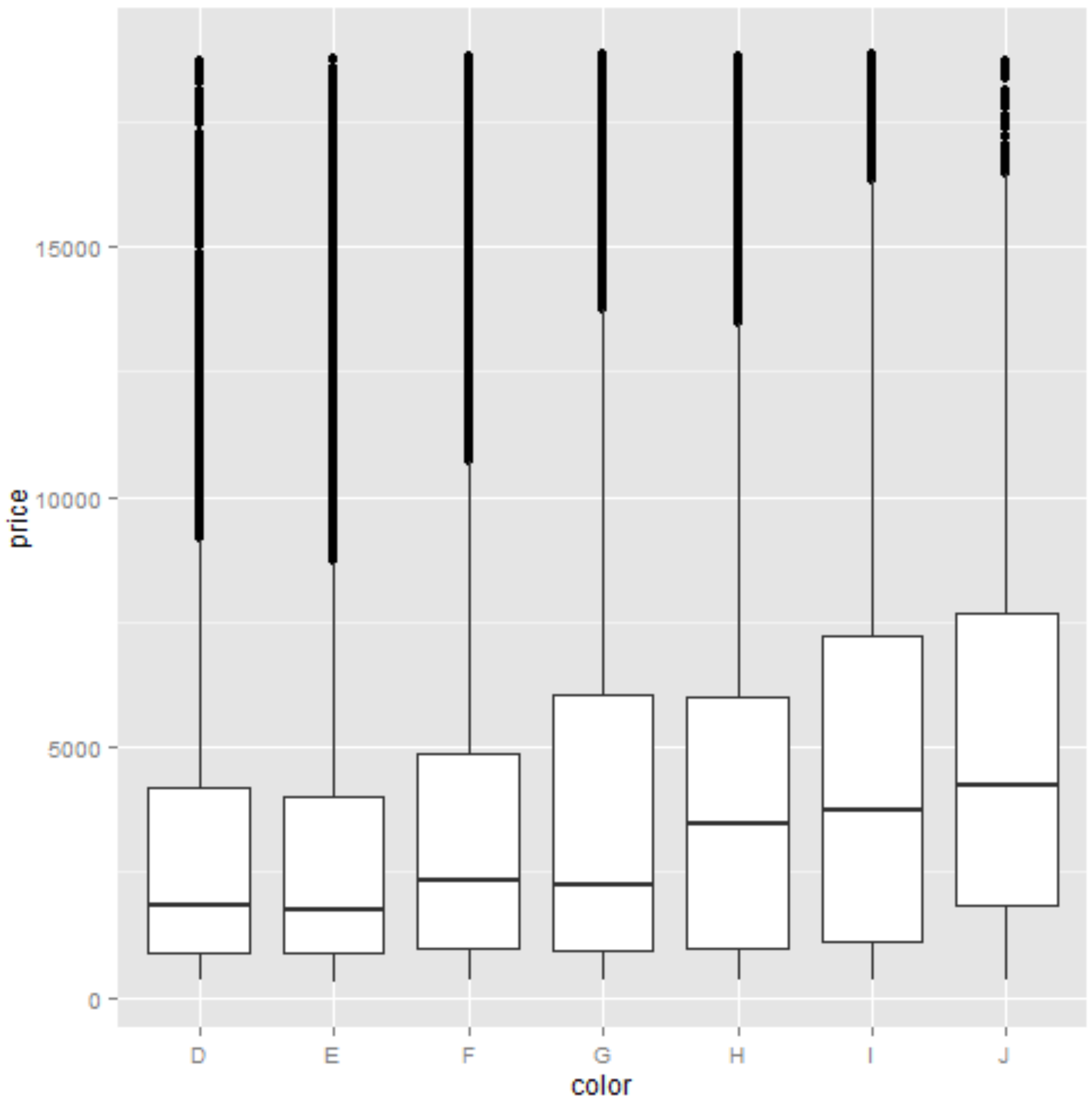
```
ggplot(diamonds, aes(x = price)) + geom_density(aes(fill = color,
color = color),
    alpha = 1/2)
```



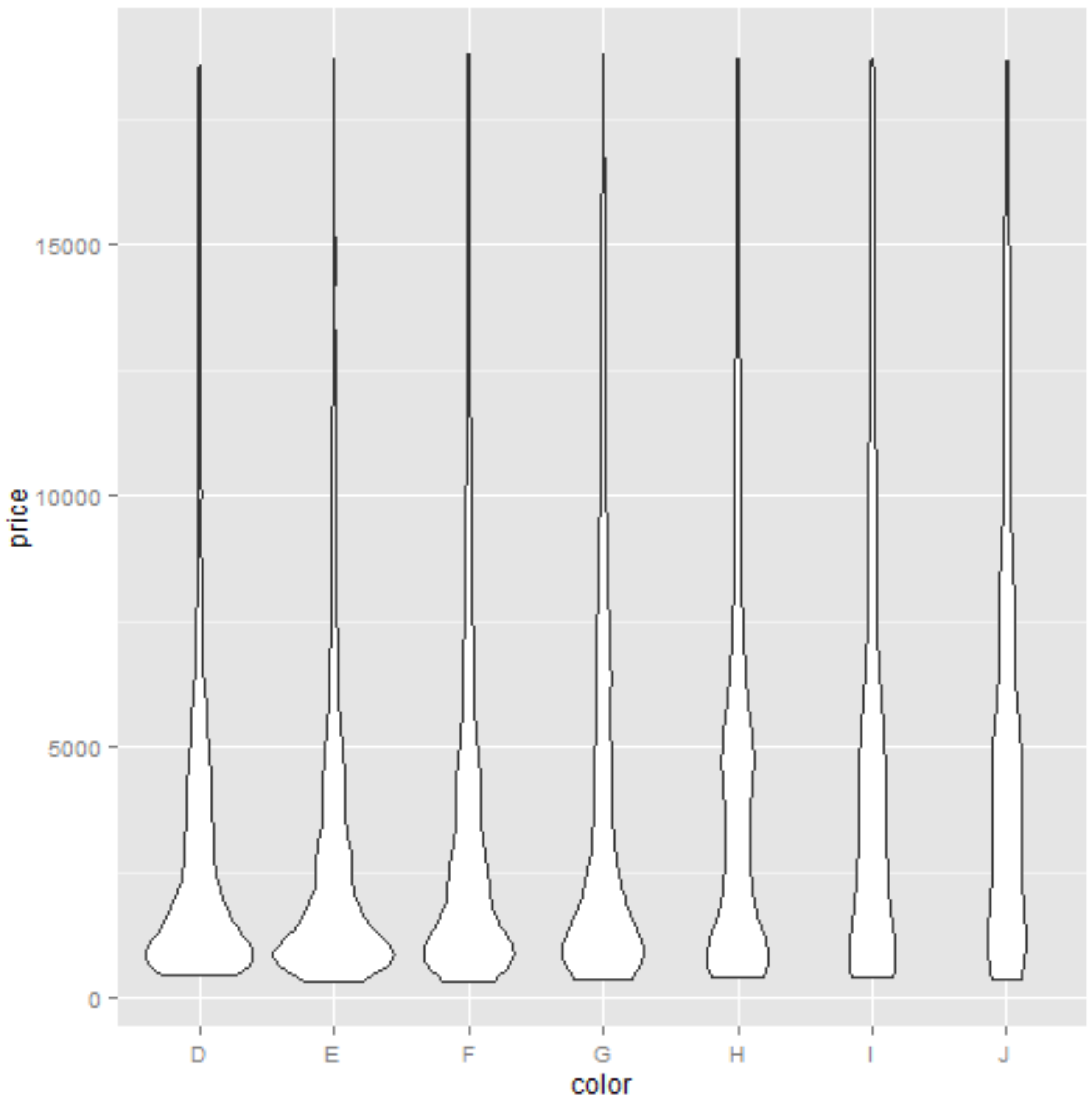
```
ggplot(diamonds, aes(y = price, x = 1)) + geom_boxplot()
```



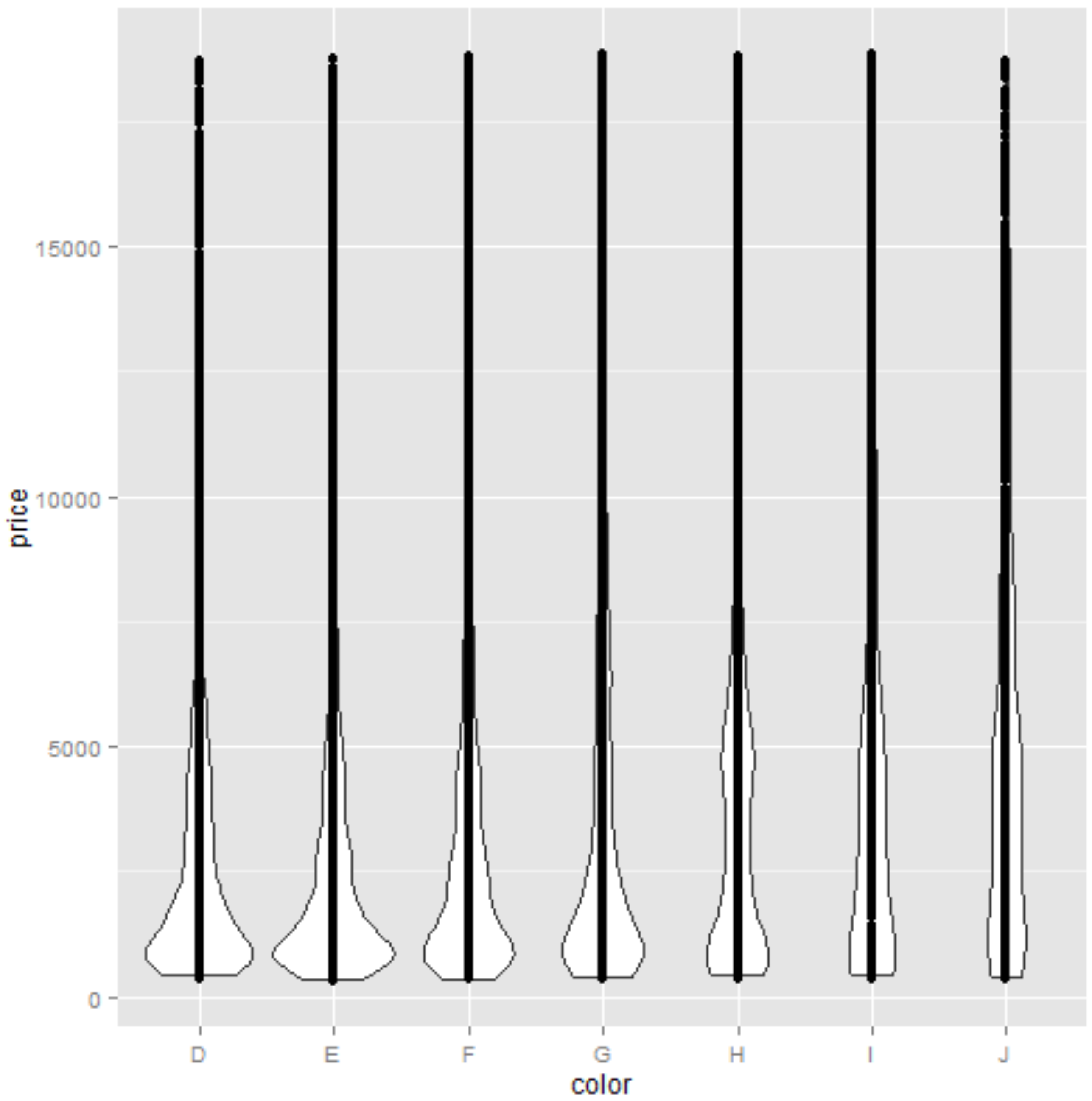
```
ggplot(diamonds, aes(y = price, x = color)) + geom_boxplot()
```



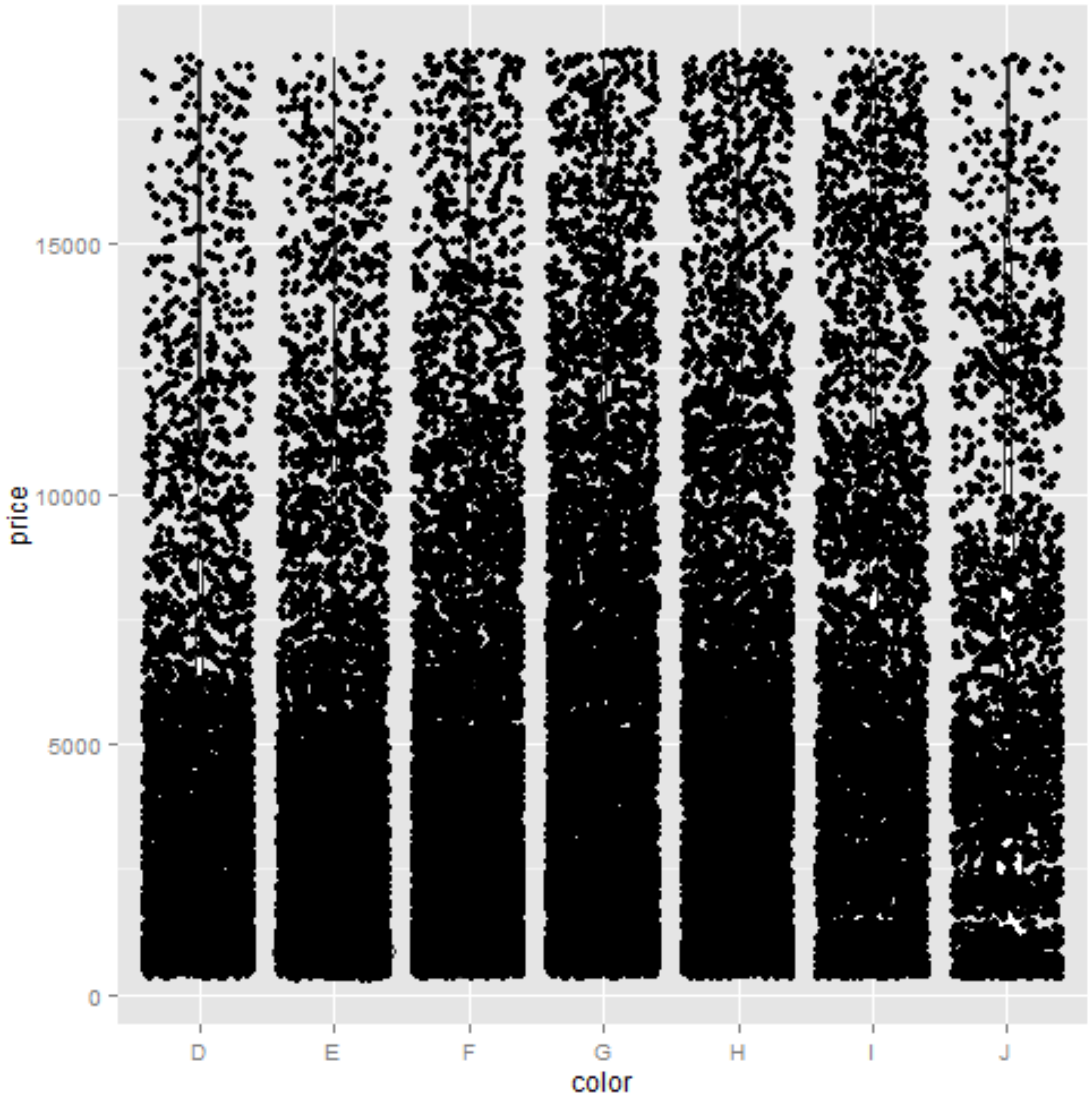
```
ggplot(diamonds, aes(y = price, x = color)) + geom_violin()
```



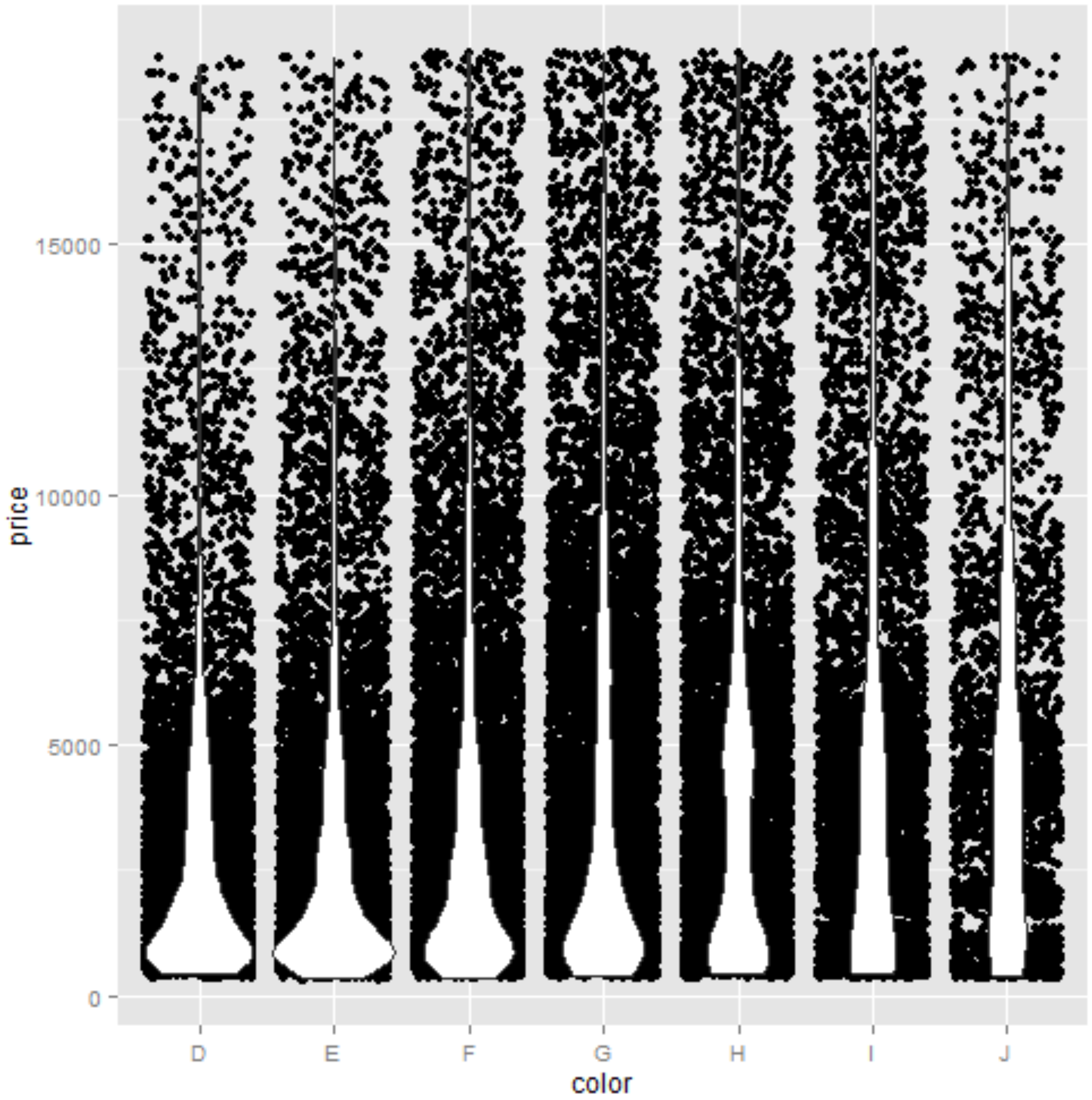
```
ggplot(diamonds, aes(y = price, x = color)) + geom_violin() +
geom_point()
```



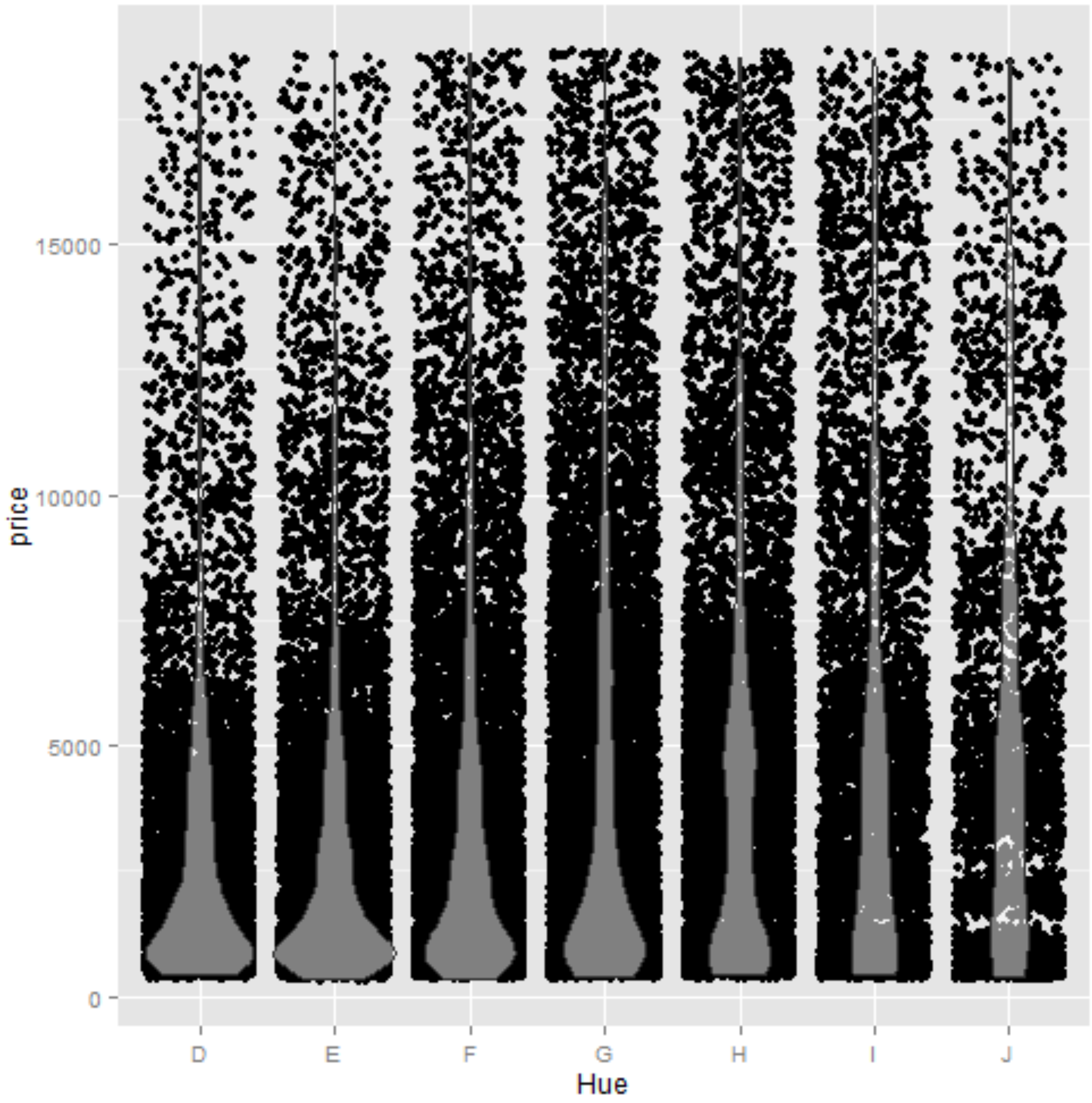
```
ggplot(diamonds, aes(y = price, x = color)) + geom_violin() +
geom_jitter()
```



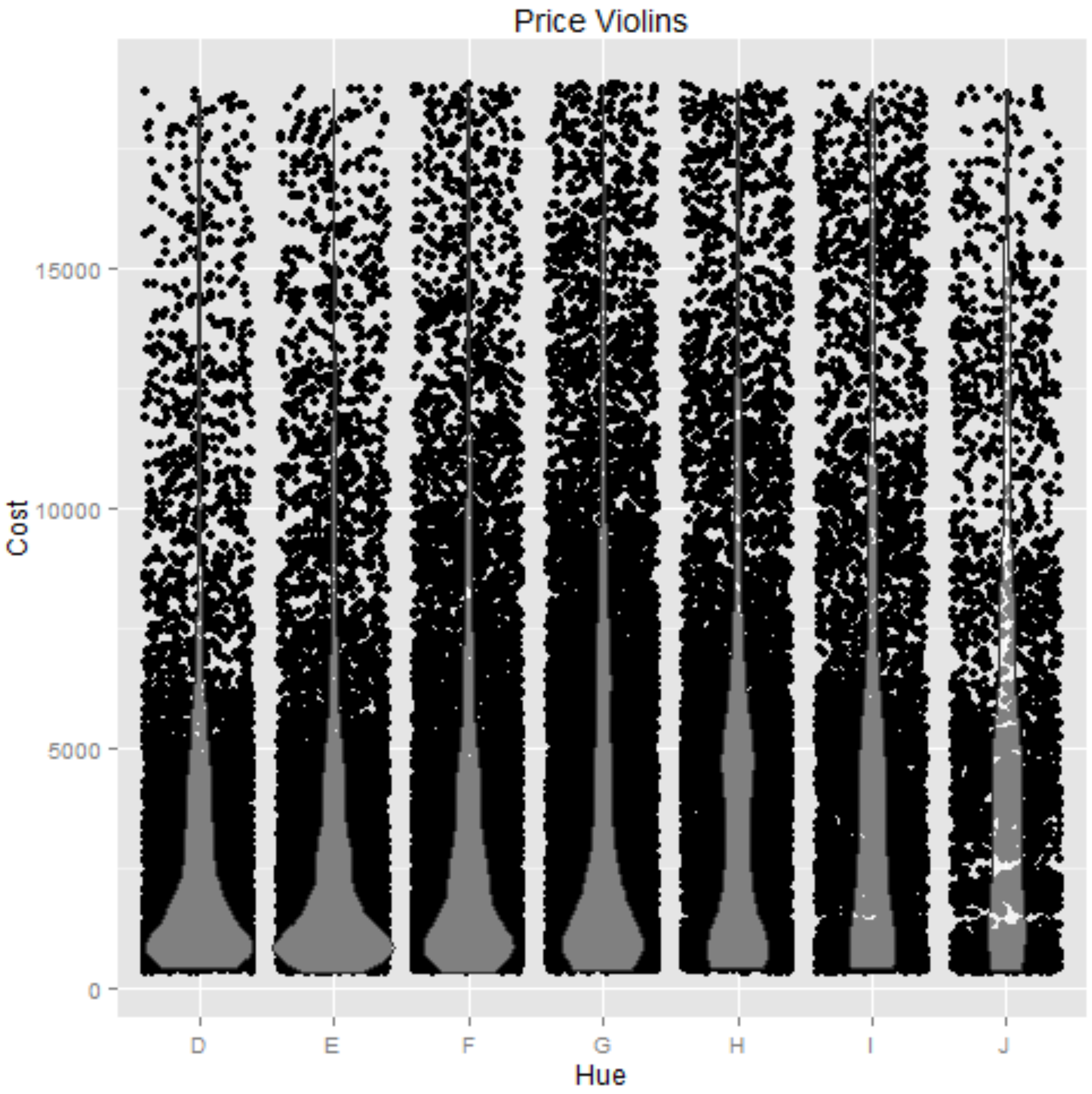
```
ggplot(diamonds, aes(y = price, x = color)) + geom_jitter() +
geom_violin()
```



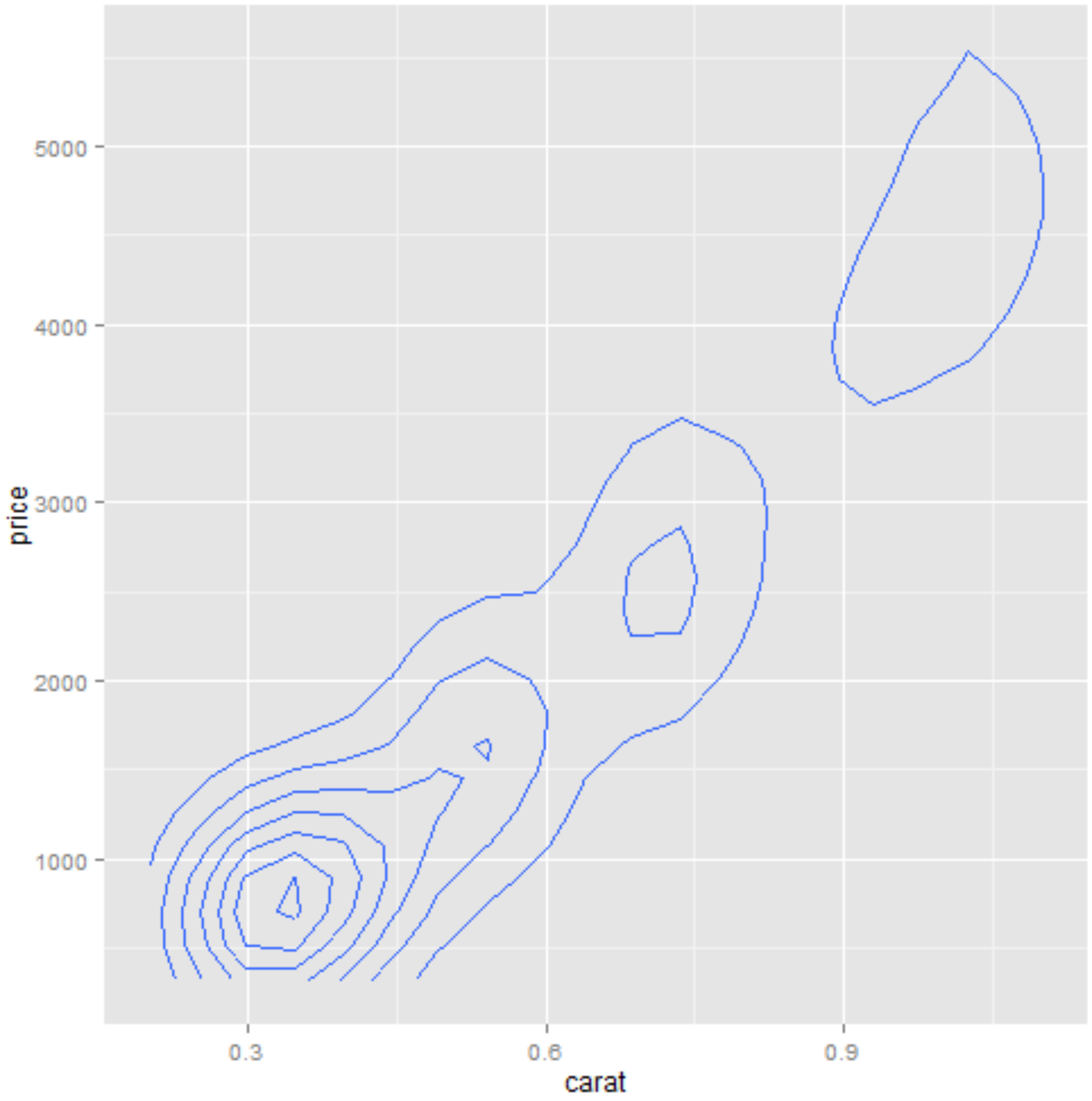
```
g3 <- ggplot(diamonds, aes(y = price, x = color)) + geom_jitter() +
geom_violin(alpha = 1/2)
g3 + xlab("Hue")
```



```
g3 + labs(x = "Hue", y = "Cost", title = "Price Violins")
```



```
ggplot(diamonds, aes(x = carat, y = price)) + geom_density2d()
```


price
5000
4000
3000
2000
1000
0.3
0.6
0.9
carat