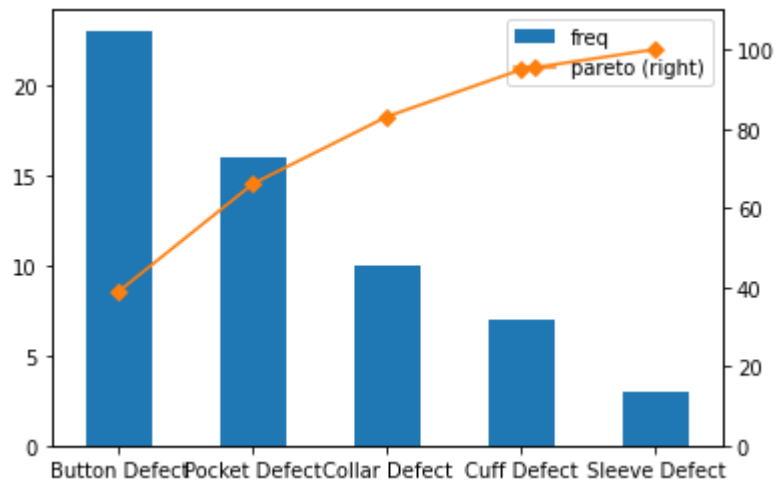


In [1]:

```

1 import pandas as pd
2 import matplotlib.pyplot as plt
3 df = pd.DataFrame({'freq': [23,16,10,7,3]})
4 df.index = ['Button Defect',
5 'Pocket Defect',
6 'Collar Defect',
7 'Cuff Defect',
8 'Sleeve Defect'
9 ]
10 df['pareto'] = 100 * df.freq.cumsum() / df.freq.sum()
11 fig, axes = plt.subplots()
12 ax1 = df.plot(use_index=True, y='freq', kind='bar', ax=axes)
13 ax2 = df.plot(use_index=True, y='pareto', marker='D', color="C1", kind='line', ax=axes, secondary_y=True)
14 ax2.set_ylim([0,110])
15 plt.show()
16 print(df)

```



	freq	pareto
Button Defect	23	38.983051
Pocket Defect	16	66.101695
Collar Defect	10	83.050847
Cuff Defect	7	94.915254
Sleeve Defect	3	100.000000

In [ ]:

1