In [4]:

```
import cv2
import numpy as np
import matplotlib.pyplot as plt
# Load image
image = cv2.imread('/Users/mehradhq/Computer_Vision/Research_2/dataset/train/Prohibition_Signs/11.jpeg', 0)

# Set our filtering parameters
# Initialize parameter setting using cv2.SimpleBlobDetector
params = cv2.SimpleBlobDetector_Params()

# Set Area filtering parameters
params.filterByArea = True
params.minArea = 100

# Set Circularity filtering parameters
params.filterByCircularity = True
params.minCircularity = 0.85

# Set Convexity filtering parameters
params.filterByConvexity = True
params.minConvexity = 0.7

# Set inertia filtering parameters
params.filterByInertia = True
params.minInertiaRatio = 0.6

# Create a detector with the parameters
detector = cv2.SimpleBlobDetector_create(params)

# Detect blobs
keypoints = detector.detect(image)

# Draw blobs on our image as red circles
blank = np.zeros((1, 1))
blobs = cv2.drawKeypoints(image, keypoints, blank, (0, 0, 255),
                          cv2.DRAW_MATCHES_FLAGS_DRAW_RICH_KEYPOINTS)

number_of_blobs = len(keypoints)
print (number_of_blobs)
# Show blobs
display(blobs)
```

4

In [3]:

```
def display(img1,cmap="gray"):
    fig=plt.figure(figsize=(12,18))
    ax=fig.add_subplot()
    ax.imshow(img1,cmap="gray")
```