Morié pattern caused by incompatable screen angles in the printing of halftone images. To avoid this unwanted problem, scanning of previously printed images must be descreened.
(not to be confused with Morey Amsterdam of the Dick Van Dyke Show)

When you scan an image it is digitized by a line of photosensitive elements. The number of elements that sense light coming from the image is determined by the optical resolution of the scanner and the size of an image. For example, if you scan with the 600 dpi scanner and the image is 3" wide, then 1800 photoelements will take part in digitizing the image. Each photoelement is a discrete unit. Here I should note that specifying the scan resolution other than optical resolution of the scanner requires additional mathematical operations to upsample/downsample the resulting image scanned. If resampling is performed by an integer fraction (e.g. 2:1 or 1:4) the mathematical transformations cause less distortion than if you resample it by a fractional scale (2:3, 1:1.5 and so on). Therefore it is a usual rule for scanning to scan at integer scale to reduce quality loss. When the image has a regular pattern (e.g. a jacket with fine fabric weave), it is superimposed with the scanner grid (the line of photoelements) that may cause interference and result in moiré patterns. This is especially true if you scan printed originals because usually a continuous-tone image is printed with halftone screens. The screen frequency and a scanner resolution may mismatch producing those dreaded moiré patterns. A misaligned or rotated original produce them too. If your scanned image reveals heavy moiré effect, try rotating the original in the scanner. Experiment with the angle of rotation to achieve the minimal moiré pattern. Scan at the highest possible resolution. Even if you use a 600 dpi scanner, scanning at 1200 dpi will help you get rid of the moiré. The second step in removing the patterns is to use effects like Gaussian Blur. Experiment with the effect radius to minimize the image quality loss (Gaussian Blur just blurs the image resulting in loss of sharpness). You can use not only integer values but also fractional. If the radius of 1 pixel seems to be insufficient but 2 pixels are too much, you can specify 1.5 pixels or thereabouts. Punching up the overall sharpness of the image, Gaussian Blur effect reduces fine jitter and speckles. However it can't heal the image from moirés completely. Sometimes, scanning the original rotated to some angle (for example 15°) then rotating it back in an image editing software in conjunction with blur effect may further decrease the affect of moiré patterns. Obviously the best way to remove the moiré patterns is to avoid scanning a printed originals. Always choose the photographs and slides when possible. Scan magazines and books only if no alternative exists.
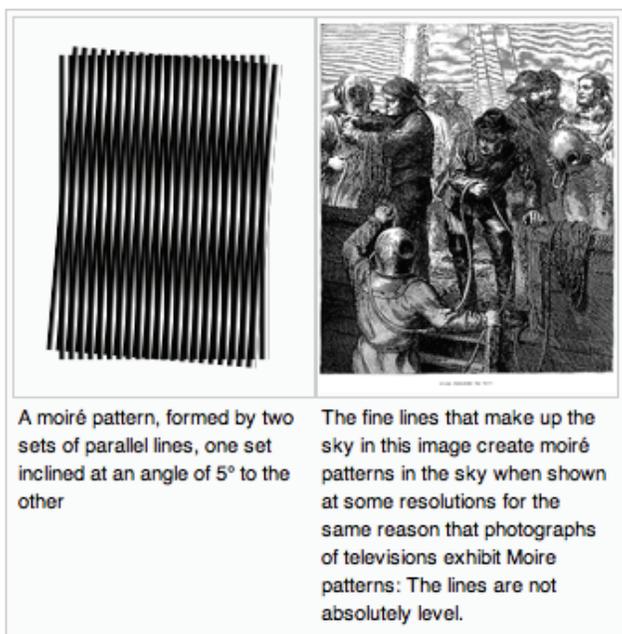
A moiré pattern, formed by two sets of parallel lines, one set inclined at an angle of 5° to the other

The fine lines that make up the sky in this image create moiré patterns in the sky when shown at some resolutions for the same reason that photographs of televisions exhibit Moire patterns: The lines are not absolutely level.