present model but also in fact for any interacting field theory. This is because the singlet operators in the Wilson expansion must have smaller dimensions than the corresponding non-singlet operators, owing to positivity. However, for asymptotically free theories the approach to unity is very slow, reflecting the fact that departures from scaling are only logarithmic. Thus, we find that the ratio $\sigma^{\nu}/\sigma^{\bar{\nu}}$, which was equal to three in the scaling region, has dropped only by about 10 percent at $\mathcal{E}$ = 200 GeV. Because of the transition region artifacts, however, we can't be too precise about this number. What is less sensitive, at large energies, are the differential cross sections $\partial\sigma^{\nu}/\partial y$ and $\partial\sigma^{\bar{\nu}}/\partial y$ at large values of y. For $\mathcal{E}$ = 200 m and $1/2 < y < 1$ these are displayed in Figs. 1 and 2. For $\partial\sigma^{\bar{\nu}}/\partial y$ in particular, we show for comparison the input curve $(1-y)^2$ which obtains at low energies. The changed behavior reflects the fact that H and K, though they are slowly varying in y away from the small y region, are no longer equal in magnitude away from small y.

(ii) The x-distribution:

As was discussed earlier, with increasing values of q^2 we expect the structure functions to fall off increasingly rapidly as $x \to 1$, and to grow increasingly rapidly as $x \to 0$. For large energies $\mathcal{E}$, which allow for contributions from large values of q^2, something of this comes through in the x-distributions $\partial\sigma^{\nu}/\partial x$ and $\partial\sigma^{\bar{\nu}}/\partial x$. This is especially the case so far as the $x \to 1$ behavior is concerned. Unfortunately, since for given x, q^2 cannot exceed $2m\mathcal{E}x$, the small x effects in the structure functions are somewhat washed out in the cross sections $\partial\sigma/\partial x$. Nevertheless, for large energies the effects are visible. The results are shown in Figs. 3 and 4, for $\mathcal{E}$ = 50 and 250 m.